

Appendix O Biological Resources

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Jurisdictional Drainages

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Jurisdictional Drainages

O8: USACE Preliminary Jurisdictional Determination

O1: USFWS Species List



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008

PHONE: (760)431-9440 FAX: (760)431-5901

URL: www.fws.gov/carlsbad/

Consultation Tracking Number: 08ECAR00-2015-SLI-0022

October 09, 2014

Project Name: San Diego Freeway (I-405) Improvement Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: San Diego Freeway (I-405) Improvement Project

Official Species List

Provided by:

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
(760) 431-9440
<http://www.fws.gov/carlsbad/>

Consultation Tracking Number: 08ECAR00-2015-SLI-0022

Project Type: Transportation

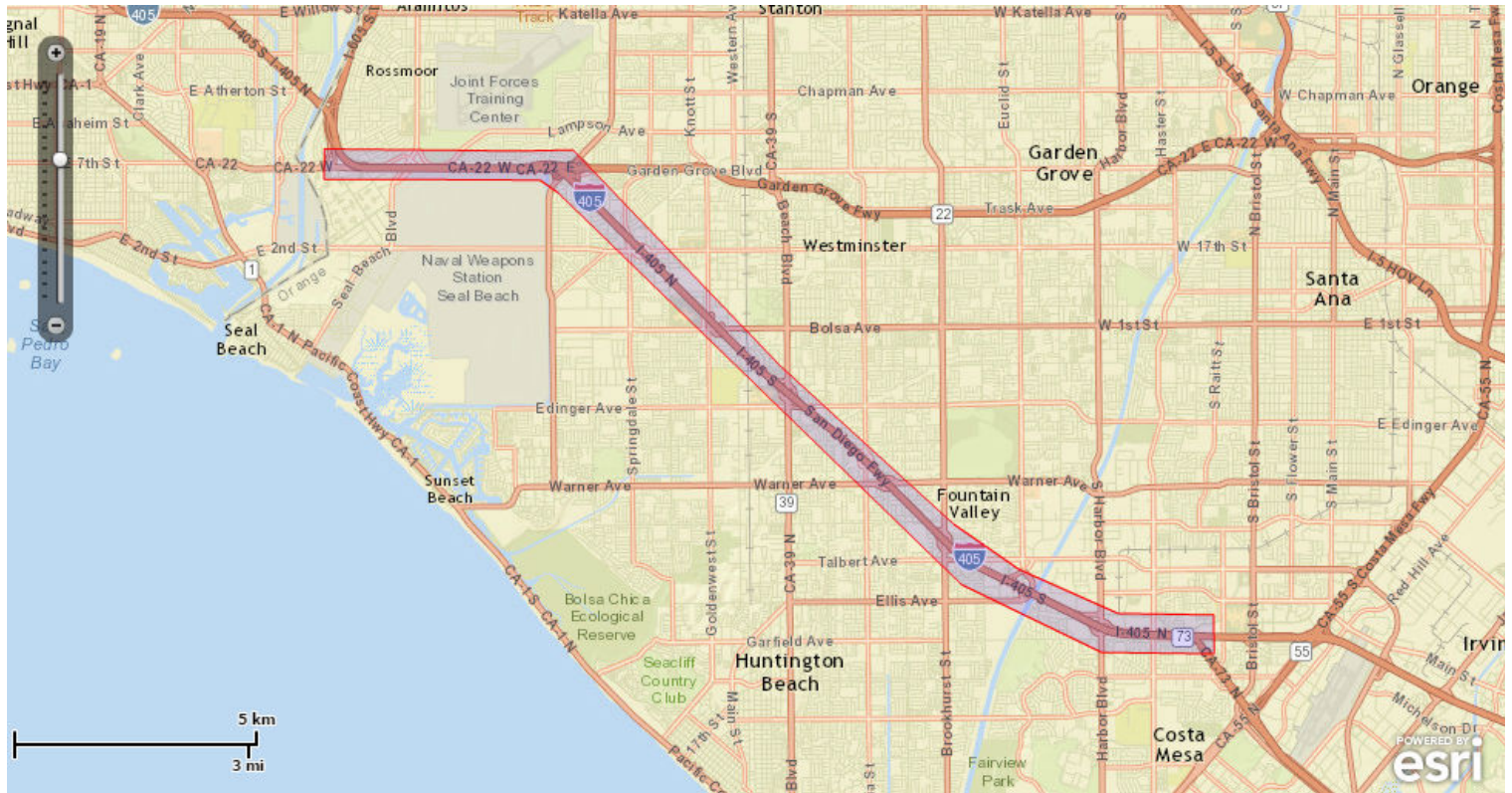
Project Description: The project proposes to improve the mainline freeway and interchanges on I-405 in Orange and Los Angeles counties. The proposed project would relieve congestion and improve operational efficiency on I-405 between State Route (SR)-73 and Interstate 605 (I-605).



United States Department of Interior
Fish and Wildlife Service

Project name: San Diego Freeway (I-405) Improvement Project

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-118.0876507 33.7777758, -118.0496387 33.7774713, -118.03694 33.7776889, -117.9907789 33.7377209, -117.9670896 33.7197323, -117.9519834 33.708309, -117.9374187 33.6999537, -117.9154048 33.691765, -117.8940511 33.6915266, -117.8939619 33.6843152, -117.9191072 33.6845563, -117.9503598 33.697158, -118.0403189 33.7697172, -118.0442142 33.7720491, -118.0924529 33.772211, -118.0923757 33.7778578, -118.0876507 33.7777758)))

Project Counties: Orange, CA



United States Department of Interior
Fish and Wildlife Service

Project name: San Diego Freeway (I-405) Improvement Project

Endangered Species Act Species List

There are a total of 10 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
California Least tern (<i>Sterna antillarum browni</i>)	Endangered		
Coastal California gnatcatcher (<i>Polioptila californica californica</i>) Population: Entire	Threatened	Final designated	
Least Bell's vireo (<i>Vireo bellii pusillus</i>) Population: Entire	Endangered	Final designated	
Light-Footed Clapper rail (<i>Rallus longirostris levipes</i>) Population: U.S.A. only	Endangered		
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
western snowy plover (<i>Charadrius nivosus ssp. nivosus</i>) Population: Pacific coastal pop.	Threatened	Final designated	
Crustaceans			



United States Department of Interior
Fish and Wildlife Service

Project name: San Diego Freeway (I-405) Improvement Project

San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	Endangered	Final designated	
Flowering Plants			
Salt Marsh bird's-beak (<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>)	Endangered		
Ventura Marsh Milk-vetch (<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>)	Endangered	Final designated	
Mammals			
Pacific Pocket mouse (<i>Perognathus longimembris pacificus</i>) Population: Entire	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: San Diego Freeway (I-405) Improvement Project

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Walsh, Jason

From: Arianne Preite [arianne_preite@dot.ca.gov]
Sent: Wednesday, April 25, 2012 12:42 PM
To: Walsh, Jason; Todaro, Ryan
Cc: Smita Deshpande; Iffat Qamar
Subject: Fw: I-405 SR-55 to I-605 Species List
Attachments: 09B0301-11SL0482_OR_I-405 Interchange Improvements_sSBrown_20110718.pdf

fyi--

----- Forwarded by Arianne Preite/D12/Caltrans/CAGov on 04/25/2012 12:38 PM

<Sally_Brown@fws.
gov>

04/25/2012 12:37
PM

Arianne Preite
<arianne_preite@dot.ca.gov>

To

cc

Subject
I-405 SR-55 to I-605 Species List

Arianne,
Per your request I am confirming that the attached species list remains correct.

Thank you,

Sally Brown
U. S. Fish and Wildlife Service
6010 Hidden Valley Road, Suite 101
Carlsbad, CA 92011
Office: (760) 431-9440 x278 (M,W,F)
Cell: (619) 261-6027 (T, Th)
Fax: (760) 918-0638
Sally_Brown@fws.gov(See attached file: 09B0301-11SL0482_OR_I-405 Interchange
Improvements_sSBrown_20110718.pdf)



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011



In Reply Refer To:
FWS-OR-09B0301-11SL0482

JUL 18 2011

Arianne Preite
District Biologist
Caltrans District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612-1692

Subject: Request for a List of Proposed, Threatened, and Endangered Species, and Critical Habitats Occurring in the I-405 Improvement Project Area from 405/55 Interchange to 405/605 Interchange, Orange County, California

Dear Ms. Preite:

This letter is in response to your letter, received June 22, 2011, for a list of federally endangered, threatened, and proposed species and critical habitats present in the vicinity of the subject project in Orange County, California. To assist you in evaluating the potential occurrence of federally listed endangered, threatened, proposed, and candidate species and their critical habitat, we are providing the enclosed list.



Because we do not have site-specific information for the proposed project, we recommend that you seek assistance from a biologist familiar with the habitat conditions and associated species in and around the project site to assess the actual potential for direct, indirect, and cumulative impacts likely to result from the proposed activity. We also suggest that you contact the California Department of Fish and Game regarding State-listed and sensitive species that may occur within the project area. Please note that State-listed species are protected under the provisions of the California Endangered Species Act.

As a reminder, if a proposed project is authorized, funded, or carried out by a Federal agency and may affect a federally listed species, then section 7 consultation pursuant to the Endangered Species Act of 1973 (Act), as amended, is required. If a proposed project does not involve a Federal agency, but is likely to result in the take of a listed animal species, then the project proponent should apply for an incidental take permit, pursuant to section 10 of the Act.

Please note that the Carlsbad Fish and Wildlife Office is hosting all critical habitat GIS data within our jurisdictional area on our website at <http://www.fws.gov/carlsbad>. Select the GIS DATA link to access current critical habitat layers.

Should you have any questions regarding the species listed or your responsibilities under the Act, please contact Sally Brown of this office at (760) 431-9440, extension 278.

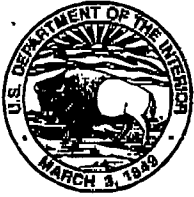
Sincerely,


 Karen A. Goebel
Assistant Field Supervisor

Enclosure

Federally Endangered, Threatened, Proposed, and Candidate Species and Critical Habitat Occurring in the I-405 Widening Project Area from 405/55 Interchange to 405/605 Interchange, Orange County, California June 18, 2011			
Common Name	Scientific Name	Federal Status	Critical Habitat
<u>Plants</u>			
Ventura marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	endangered	none
salt marsh bird's beak	<i>Cordylanthus maritimus</i> subsp. <i>maritimus</i>	endangered	N/A
Brand's phacelia	<i>Phacelia stellaris</i>	candidate	N/A
<u>Birds</u>			
western snowy plover	<i>Charadrius alexandrinus nivosus</i>	threatened	none
coastal California gnatcatcher	<i>Polioptila californica californica</i>	threatened	none
light-footed clapper rail	<i>Rallus longirostris levipes</i>	endangered	N/A
California least tern	<i>Sternula antillarum browni</i>	endangered	N/A
least Bell's vireo	<i>Vireo bellii pusillus</i>	endangered	none
<u>Reptiles</u>			
Green sea turtle	<i>Chelonias mydas</i>	threatened	none

* N/A = Not Applicable



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services

Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011



In Reply Refer To:
FWS-OR-09B0301-09SL0891

JUN 11 2009

Arianne Preite
District Biologist
Caltrans District 12
3337 Michelson Drive, Suite CN380
Irvine, California 92612-0699

Subject: Request for a List of Proposed, Threatened, and Endangered Species, and Critical Habitats Occurring in the I-405 Widening Project Area from 405/55 Interchange to 405/605 Interchange, Orange County, California

Dear Ms. Preite:

This letter is in response to your letter, received May 13, 2009, for a list of federally endangered, threatened, and proposed species and critical habitats present in the vicinity of the subject project in Orange County, California. To assist you in evaluating the potential occurrence of federally listed endangered, threatened, proposed, and candidate species and their critical habitat, we are providing the enclosed list.

Because we do not have site-specific information for the proposed project, we recommend that you seek assistance from a biologist familiar with the habitat conditions and associated species in and around the project site to assess the actual potential for direct, indirect, and cumulative impacts likely to result from the proposed activity. We also suggest that you contact the California Department of Fish and Game regarding State-listed and sensitive species that may occur within the project area. Please note that State-listed species are protected under the provisions of the California Endangered Species Act.

As a reminder, if a proposed project is authorized, funded, or carried out by a Federal agency and may affect a federally listed species, then section 7 consultation pursuant to the Endangered Species Act of 1973 (Act), as amended, is required. If a proposed project does not involve a Federal agency, but is likely to result in the take of a listed animal species, then the project proponent should apply for an incidental take permit, pursuant to section 10 of the Act.

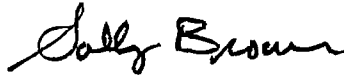



Arianne Priete (FWS-OR-09B0301-09SL0891)

2

Should you have any questions regarding the species listed or your responsibilities under the Act, please contact Sally Brown of this office at (760) 431-9440, extension 278.

Sincerely,

A handwritten signature in cursive script that reads "Sally Brown".

 Karen A. Goebel
Assistant Field Supervisor

Enclosure

Arianne Priete (FWS-OR-09B0301-09SL0891)

3

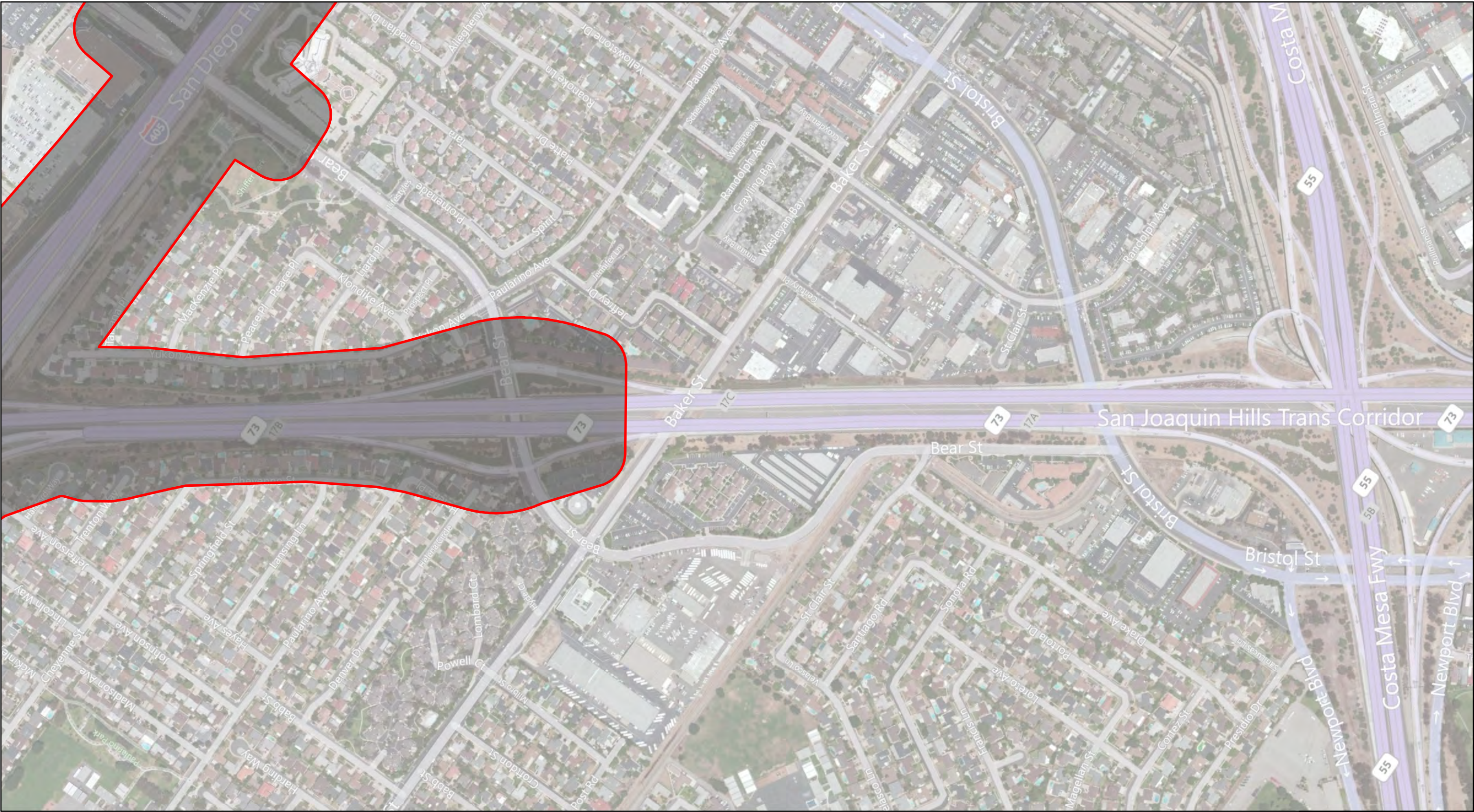
**Federally Endangered, Threatened, Proposed, and Candidate Species and Critical
Habitat Occurring in the I-405 Widening Project Area from 405/55 Interchange to
405/605 Interchange, Orange County, California**

June 10, 2009

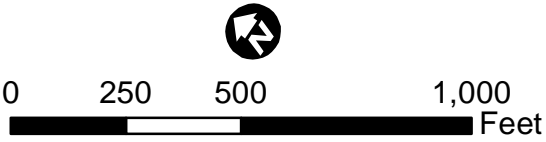
Common Name	Scientific Name	Federal Status	Critical Habitat
<u>Plants</u>			
Ventura marsh milk-vetch	<i>Astragalus pycnostachyus var. lanosissimus</i>	endangered	none
salt marsh bird's beak	<i>Cordylanthus maritimus subsp. maritimus</i>	endangered	N/A
Brand's phacelia	<i>Phacelia stellaris</i>	candidate	N/A
<u>Birds</u>			
western snowy plover	<i>Charadrius alexandrinus nivosus</i>	threatened	none
brown pelican	<i>Pelecanus occidentalis</i>	endangered	N/A
coastal California gnatcatcher	<i>Polioptila californica californica</i>	threatened	none
light-footed clapper rail	<i>Rallus longirostris levipes</i>	endangered	N/A
California least tern	<i>Sternula antillarum browni</i>	endangered	N/A
least Bell's vireo	<i>Vireo bellii pusillus</i>	endangered	none

* N/A = Not Applicable

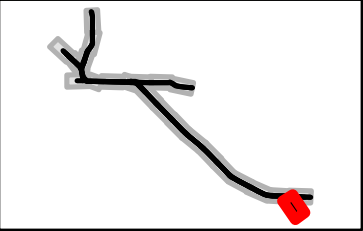
O2: Alternative 1 Vegetation Community Impacts

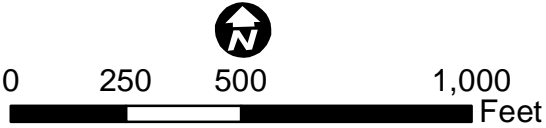
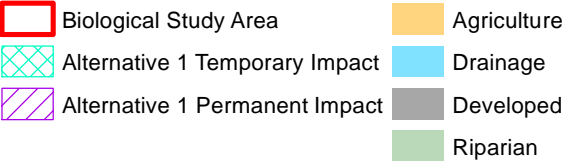


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 1 Temporary Impact | Drainage |
| Alternative 1 Permanent Impact | Developed |
| | Riparian |

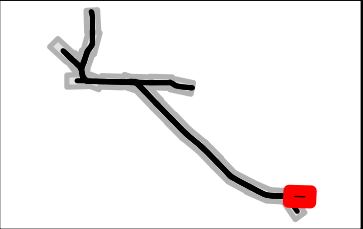


Vegetation Communities
Alternative 1
March 2012
Figure 3-1



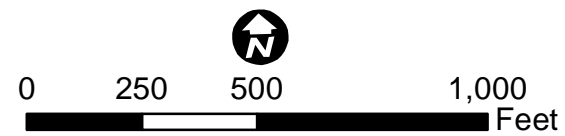


Vegetation Communities
Alternative 1
March 2012
Figure 3-2

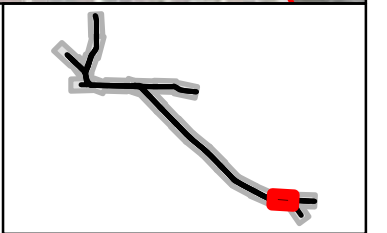


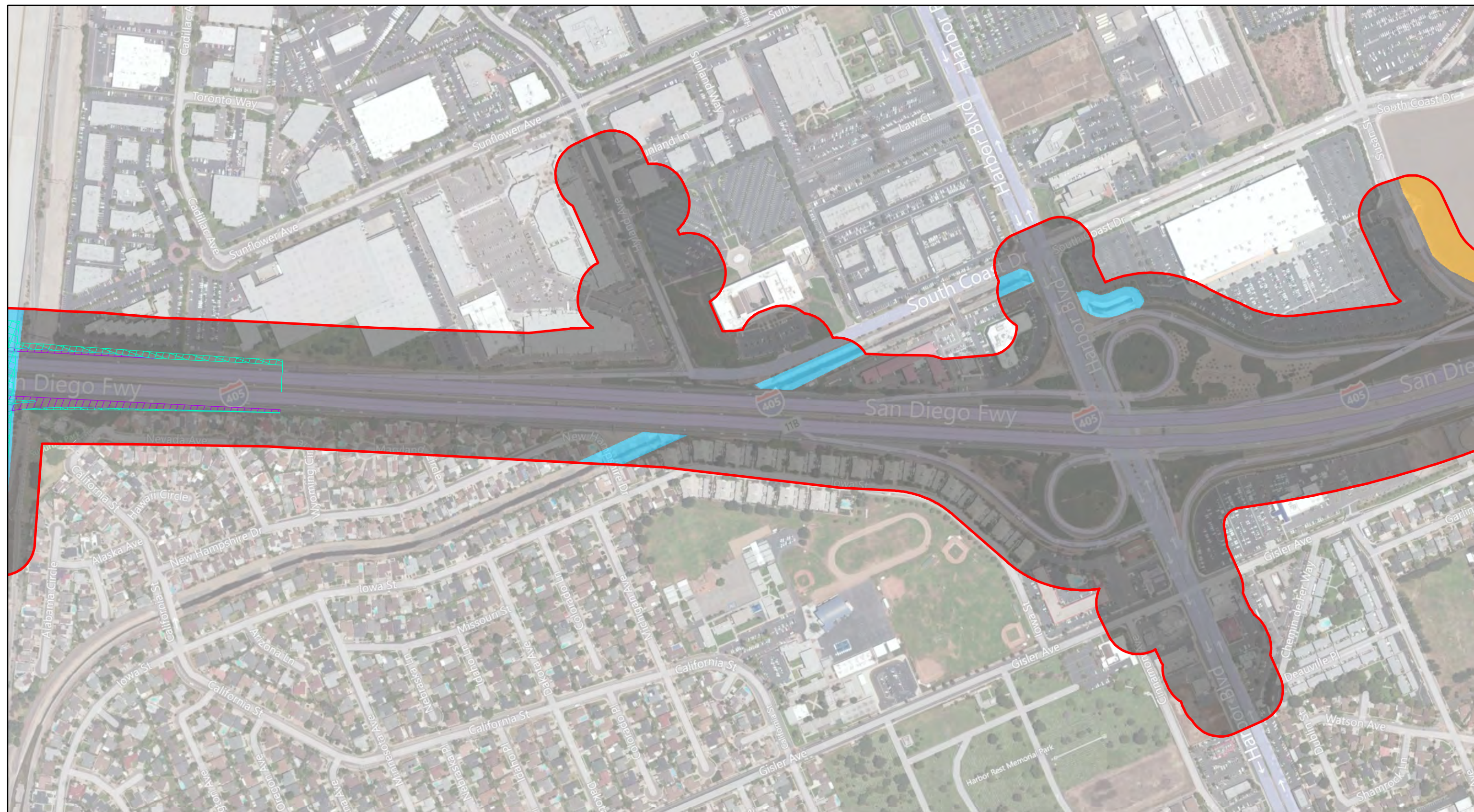


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| Biological Study Area | Agriculture |
| Alternative 1 Temporary Impact | Drainage |
| Alternative 1 Permanent Impact | Developed |
| | Riparian |

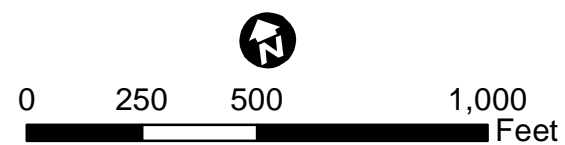


Vegetation Communities
Alternative 1
March 2012
 Figure 3-3

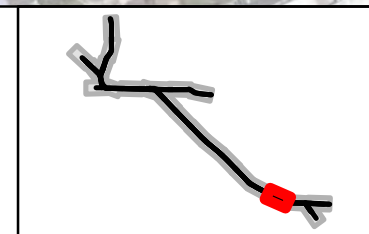


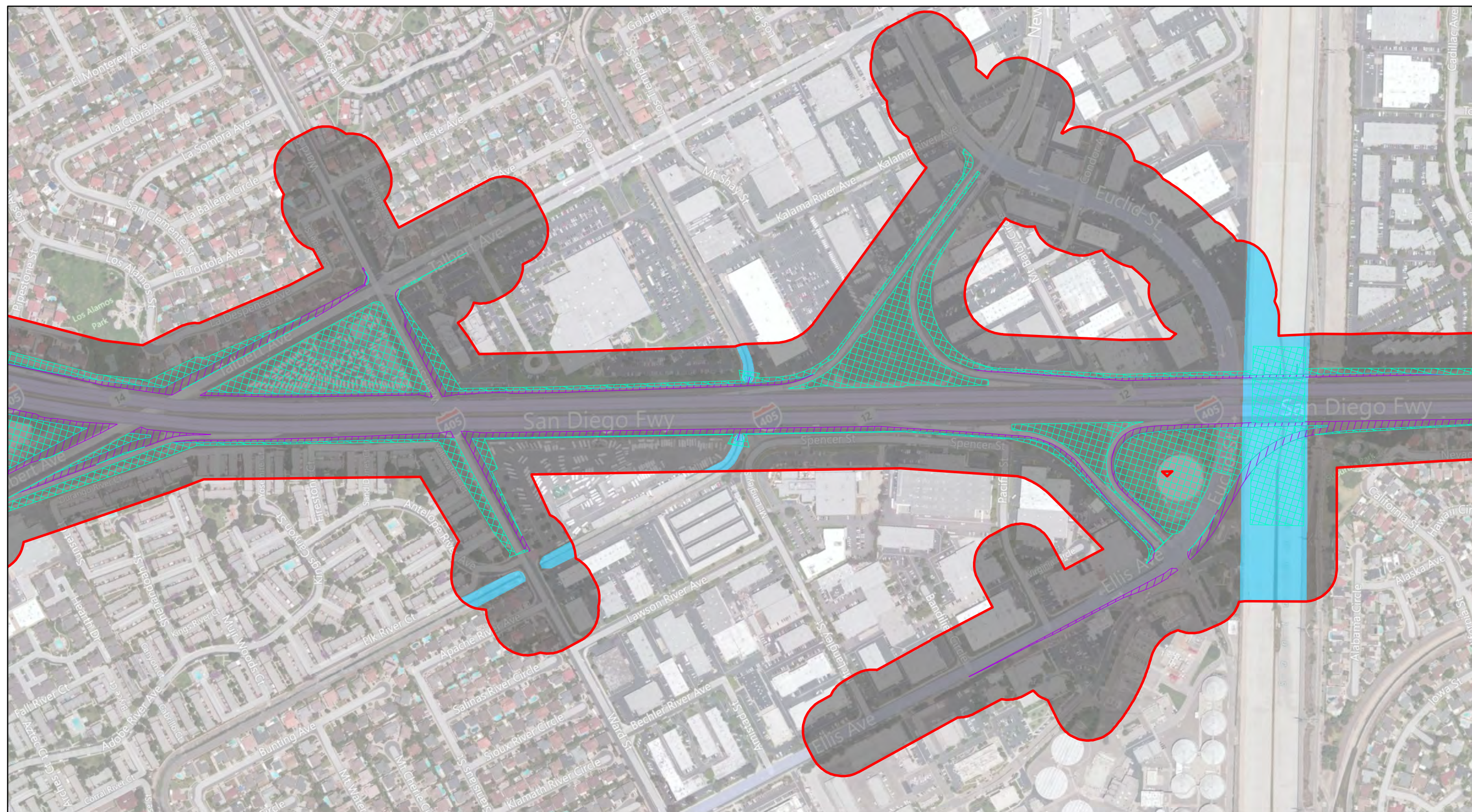









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| Biological Study Area | Agriculture |
| Alternative 1 Temporary Impact | Drainage |
| Alternative 1 Permanent Impact | Developed |
| | Riparian |

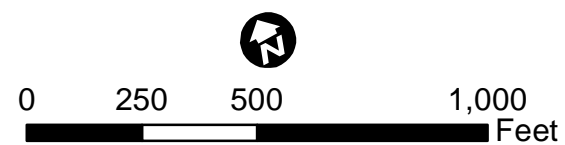


Vegetation Communities
Alternative 1
March 2012
 Figure 3-4

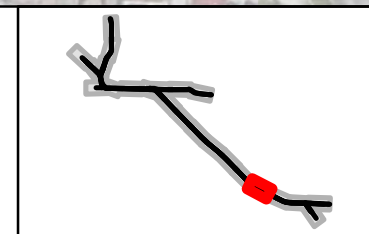


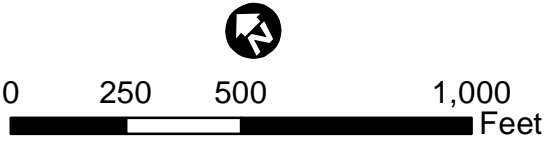
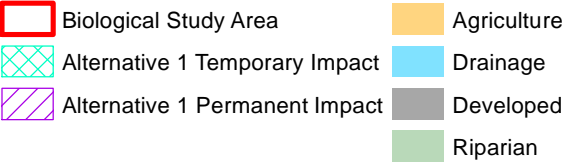
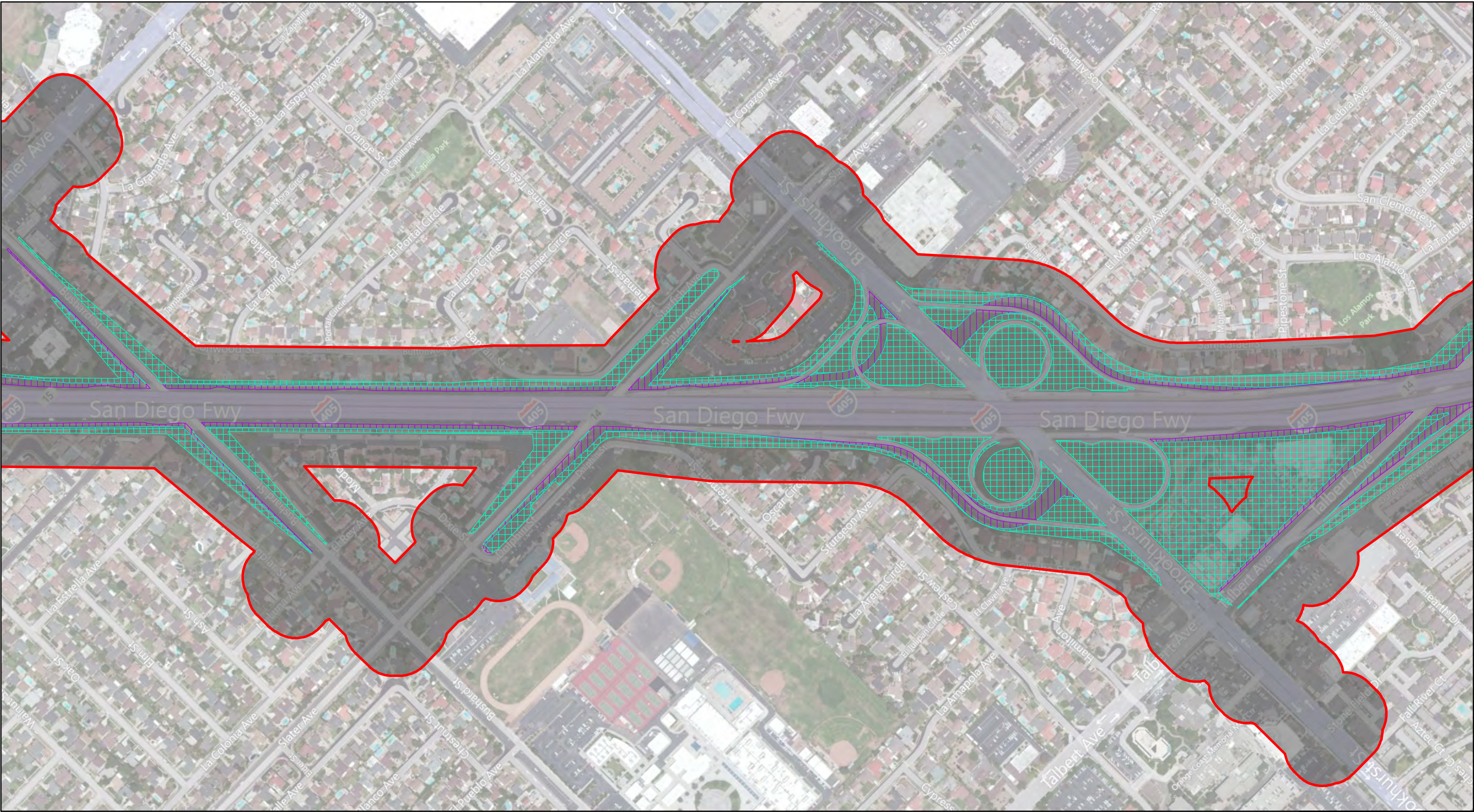


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|---|---|
|  Biological Study Area |  Agriculture |
|  Alternative 1 Temporary Impact |  Drainage |
|  Alternative 1 Permanent Impact |  Developed |
| |  Riparian |

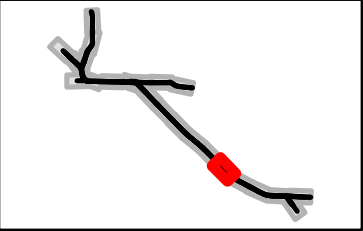


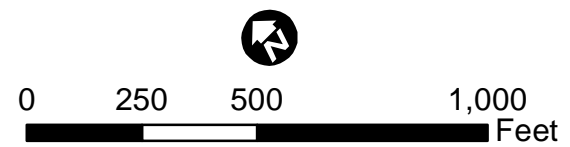
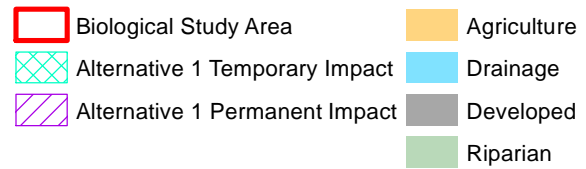
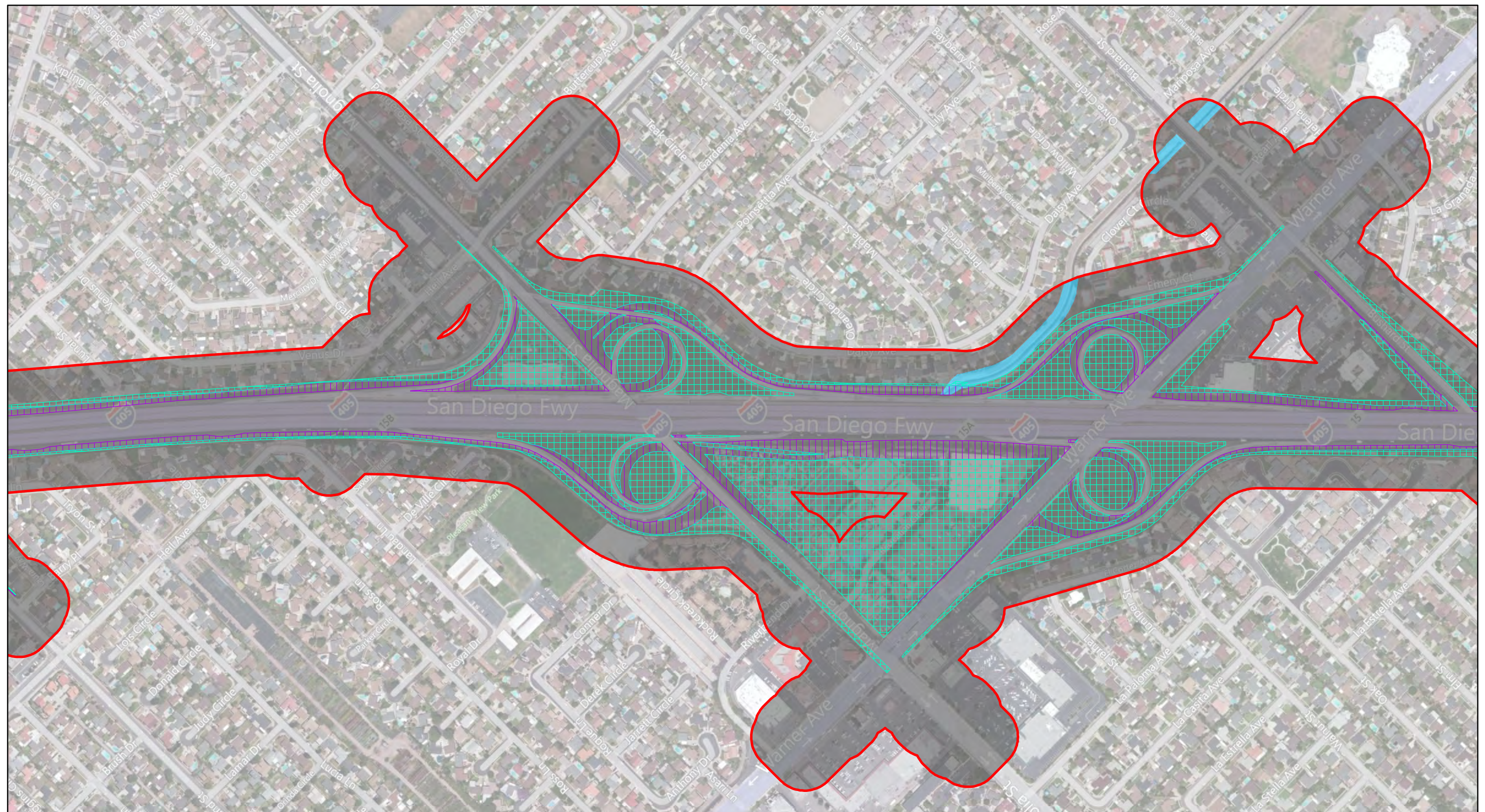
**Vegetation Communities
Alternative 1
March 2012**
Figure 3-5



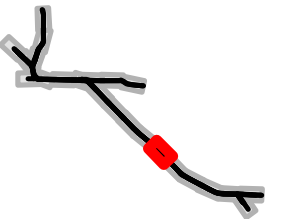


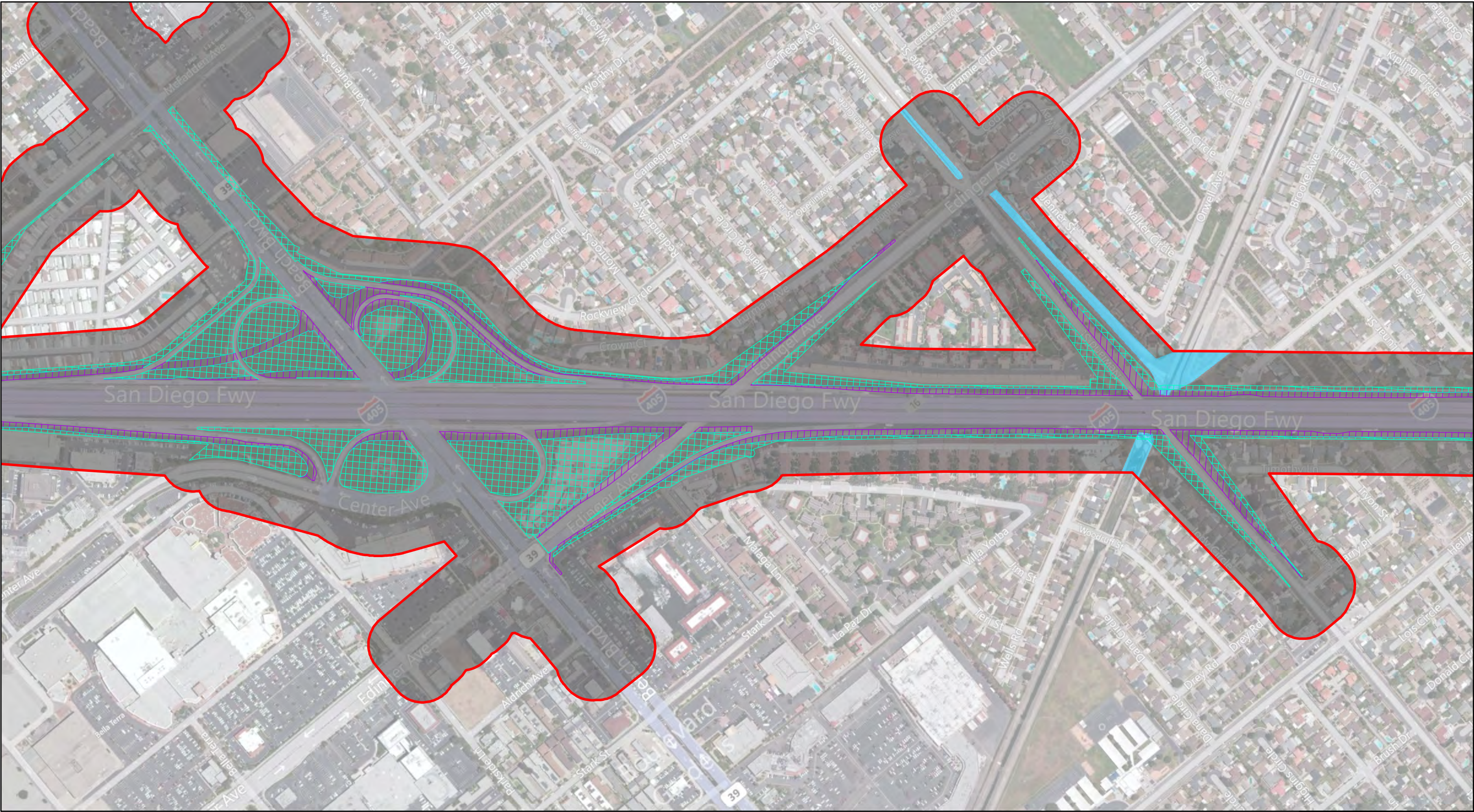
**Vegetation Communities
Alternative 1
March 2012**
Figure 3-6



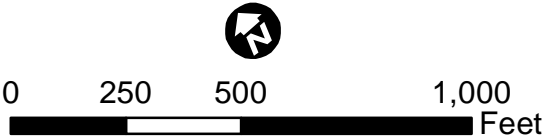


Vegetation Communities
Alternative 1
March 2012
Figure 3-7

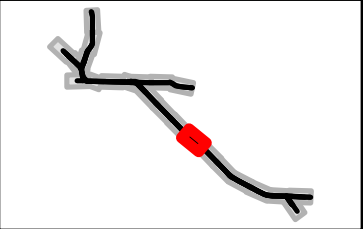


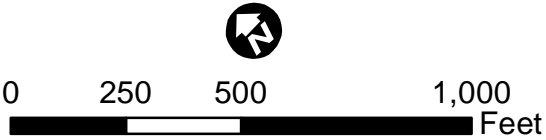
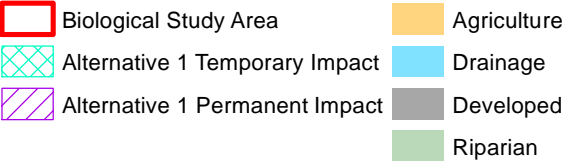


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 1 Temporary Impact | Drainage |
| Alternative 1 Permanent Impact | Developed |
| | Riparian |

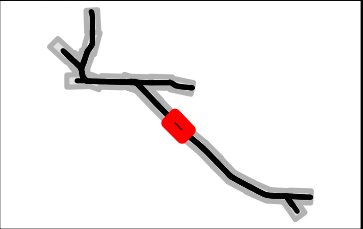


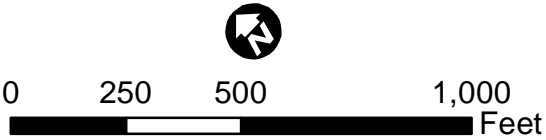
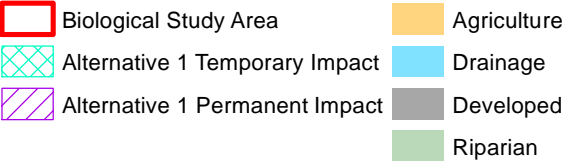
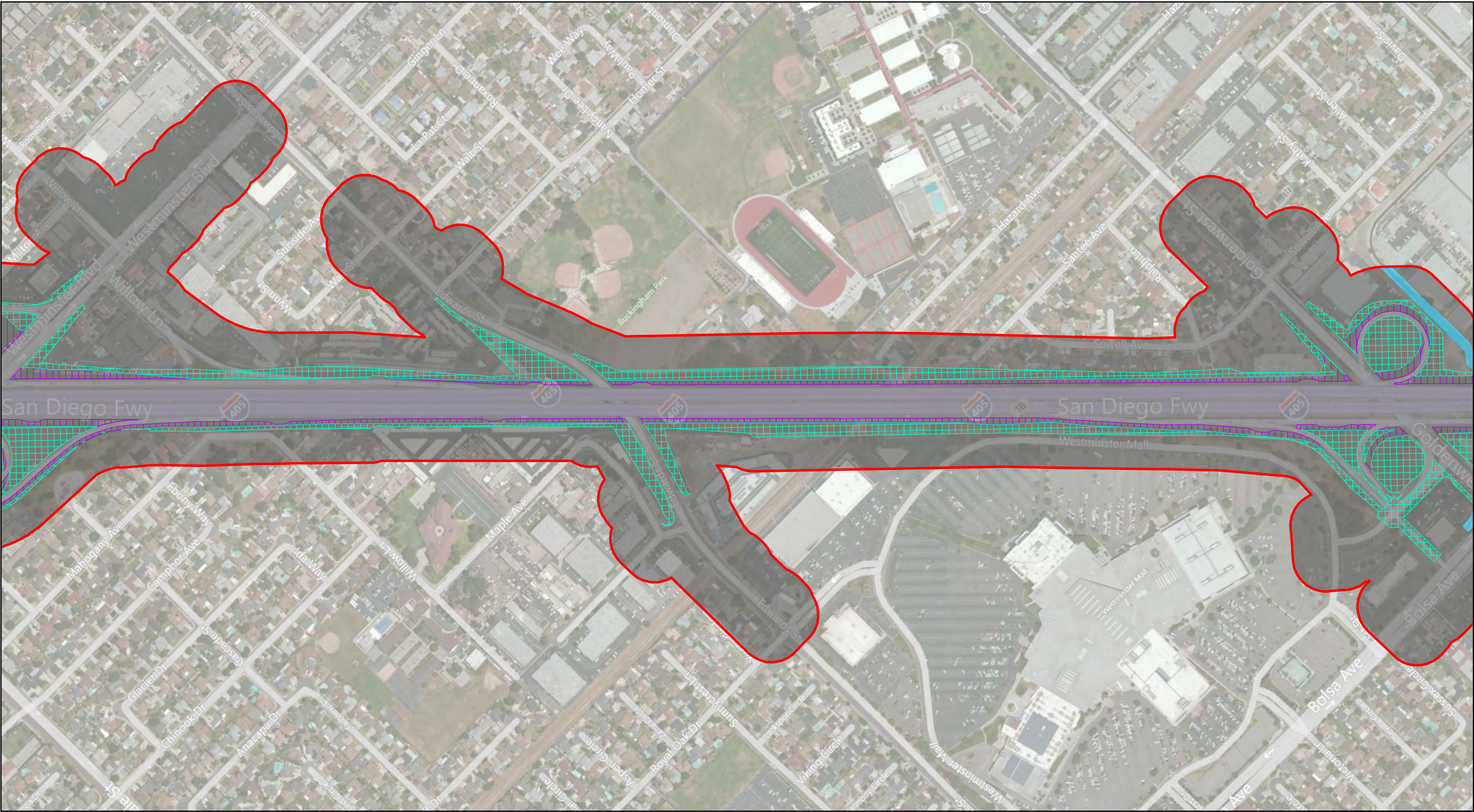
Vegetation Communities
Alternative 1
March 2012
Figure 3-8



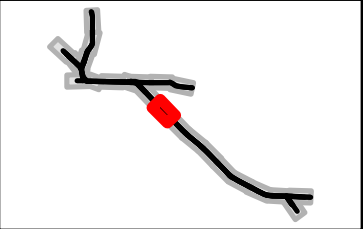


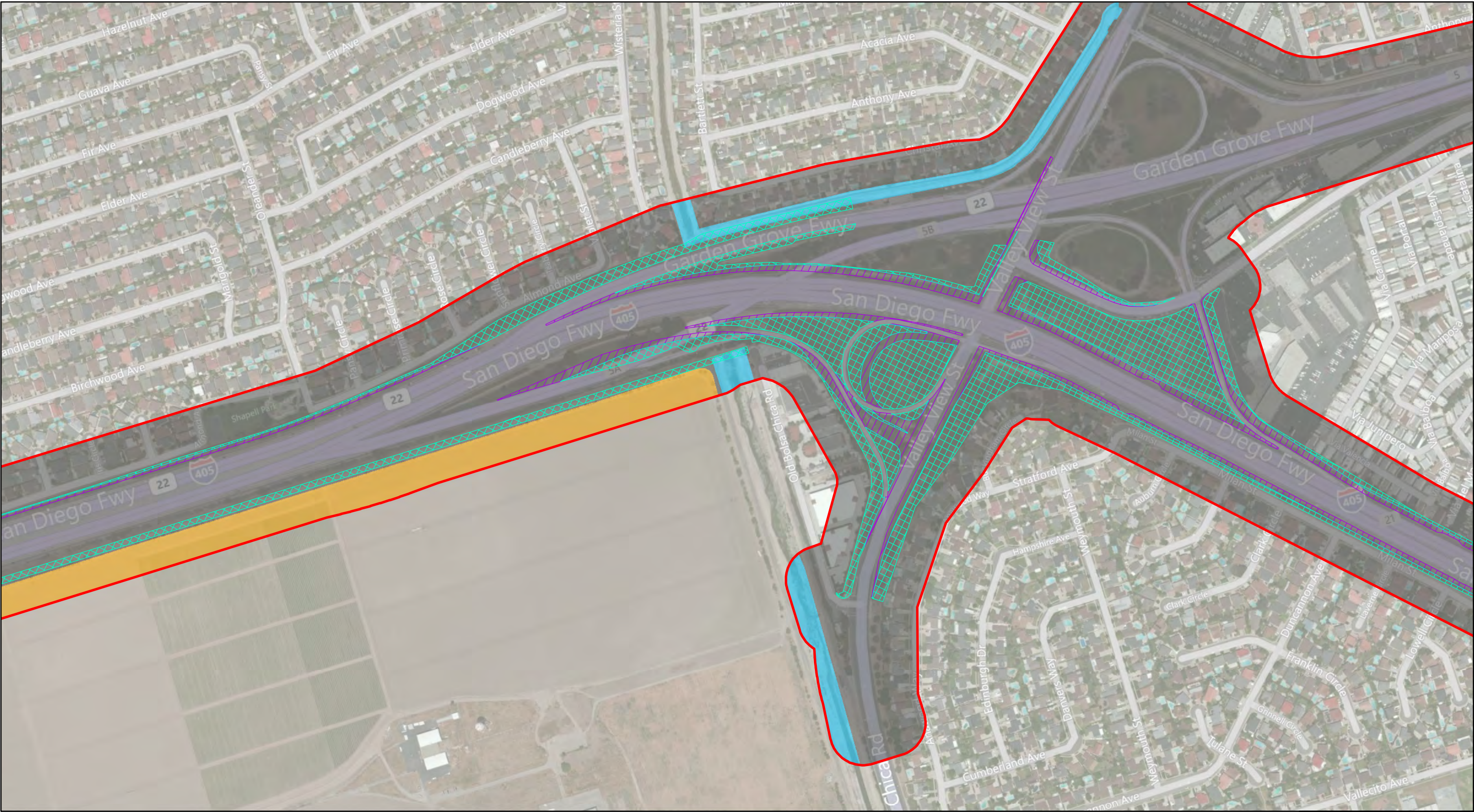
Vegetation Communities
Alternative 1
March 2012
Figure 3-9



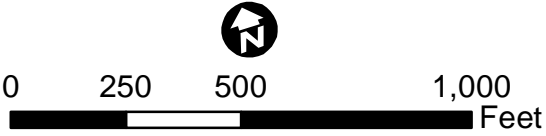


Vegetation Communities
Alternative 1
March 2012
Figure 3-10

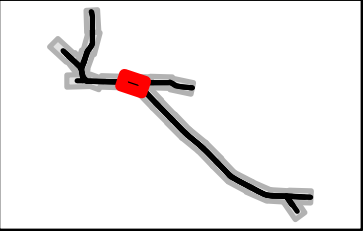











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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 1 Temporary Impact | Drainage |
| Alternative 1 Permanent Impact | Developed |
| | Riparian |

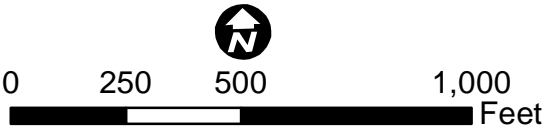


Vegetation Communities
Alternative 1
March 2012
Figure 3-12

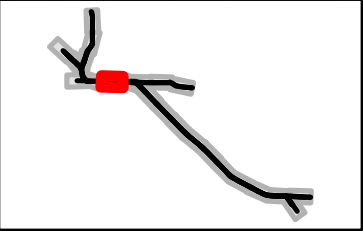


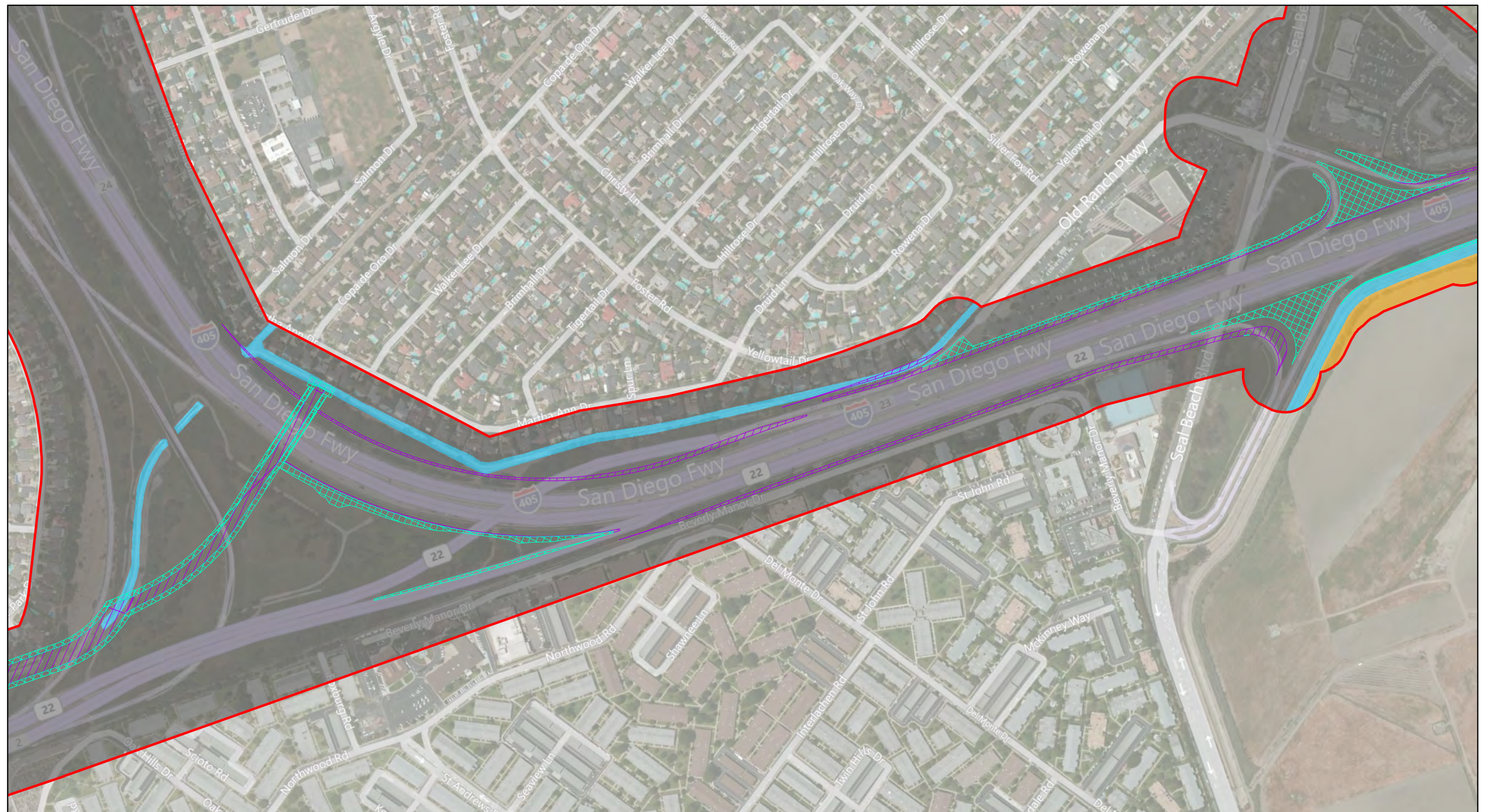


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|---|---|
|  Biological Study Area |  Agriculture |
|  Alternative 1 Temporary Impact |  Drainage |
|  Alternative 1 Permanent Impact |  Developed |
| |  Riparian |

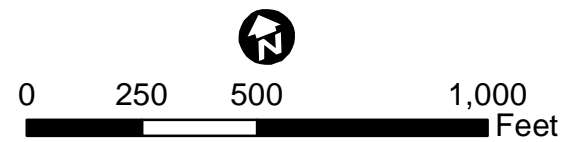


Vegetation Communities
Alternative 1
March 2012
Figure 3-13

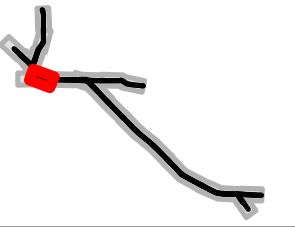




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|---|---|
| Biological Study Area | Agriculture |
| Alternative 1 Temporary Impact | Drainage |
| Alternative 1 Permanent Impact | Developed |
| | Riparian |



Vegetation Communities
Alternative 1
March 2012
 Figure 3-14

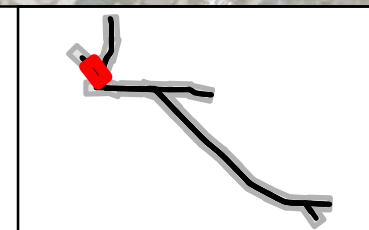


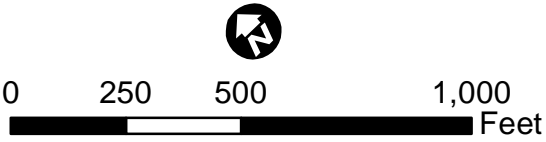
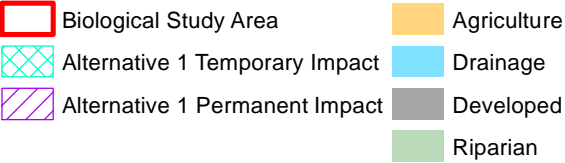
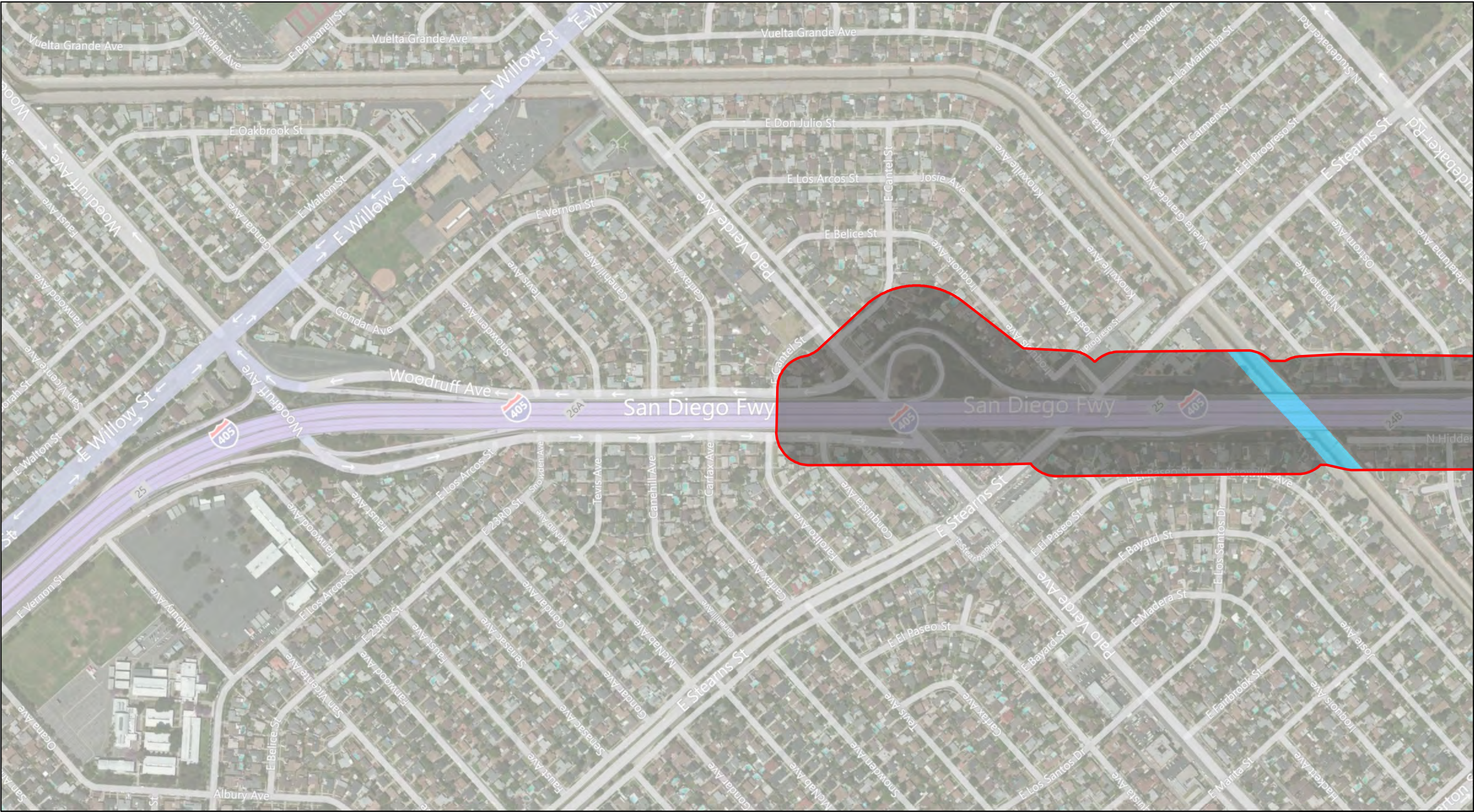


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 1 Temporary Impact | Drainage |
| Alternative 1 Permanent Impact | Developed |
| | Riparian |

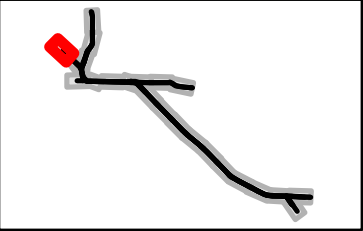


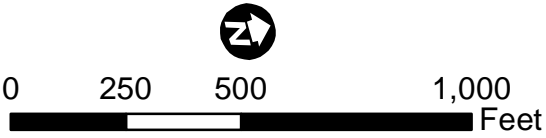
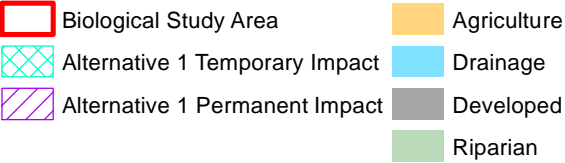
**Vegetation Communities
Alternative 1
March 2012**
Figure 3-15



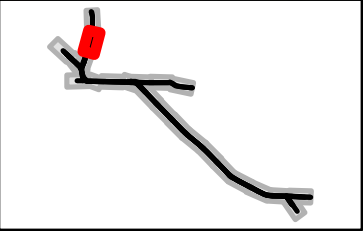


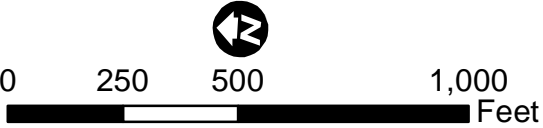
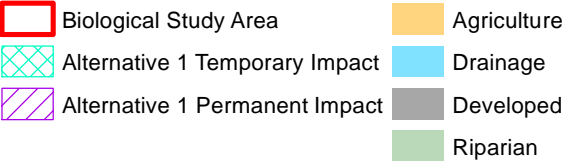
Vegetation Communities
Alternative 1
March 2012
Figure 3-16



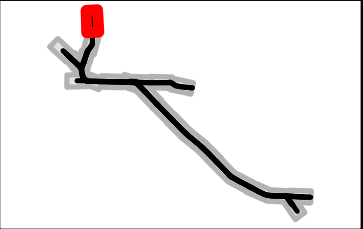


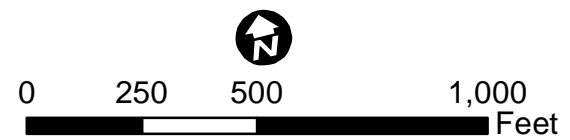
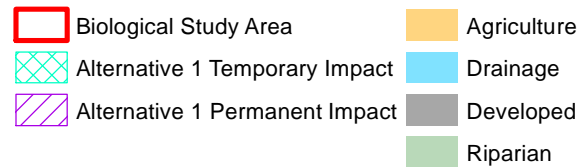
**Vegetation Communities
Alternative 1
March 2012**
Figure 3-17



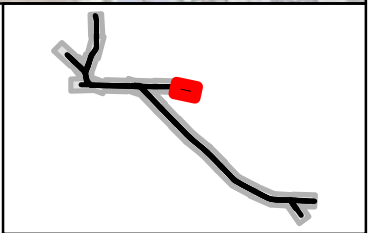


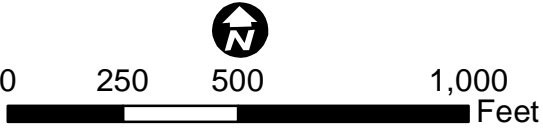
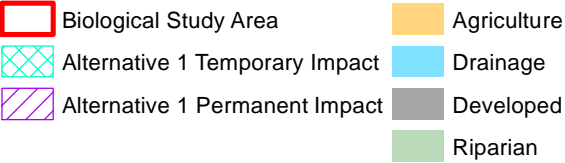
Vegetation Communities
Alternative 1
March 2012
Figure 3-18



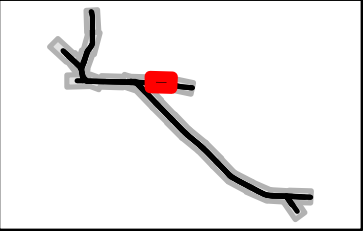


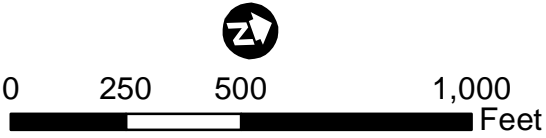
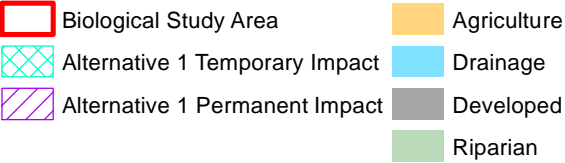
Vegetation Communities
Alternative 1
March 2012
 Figure 3-19



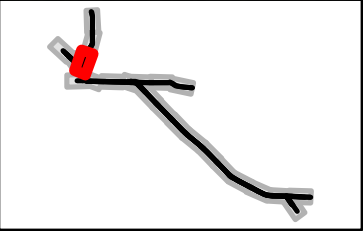


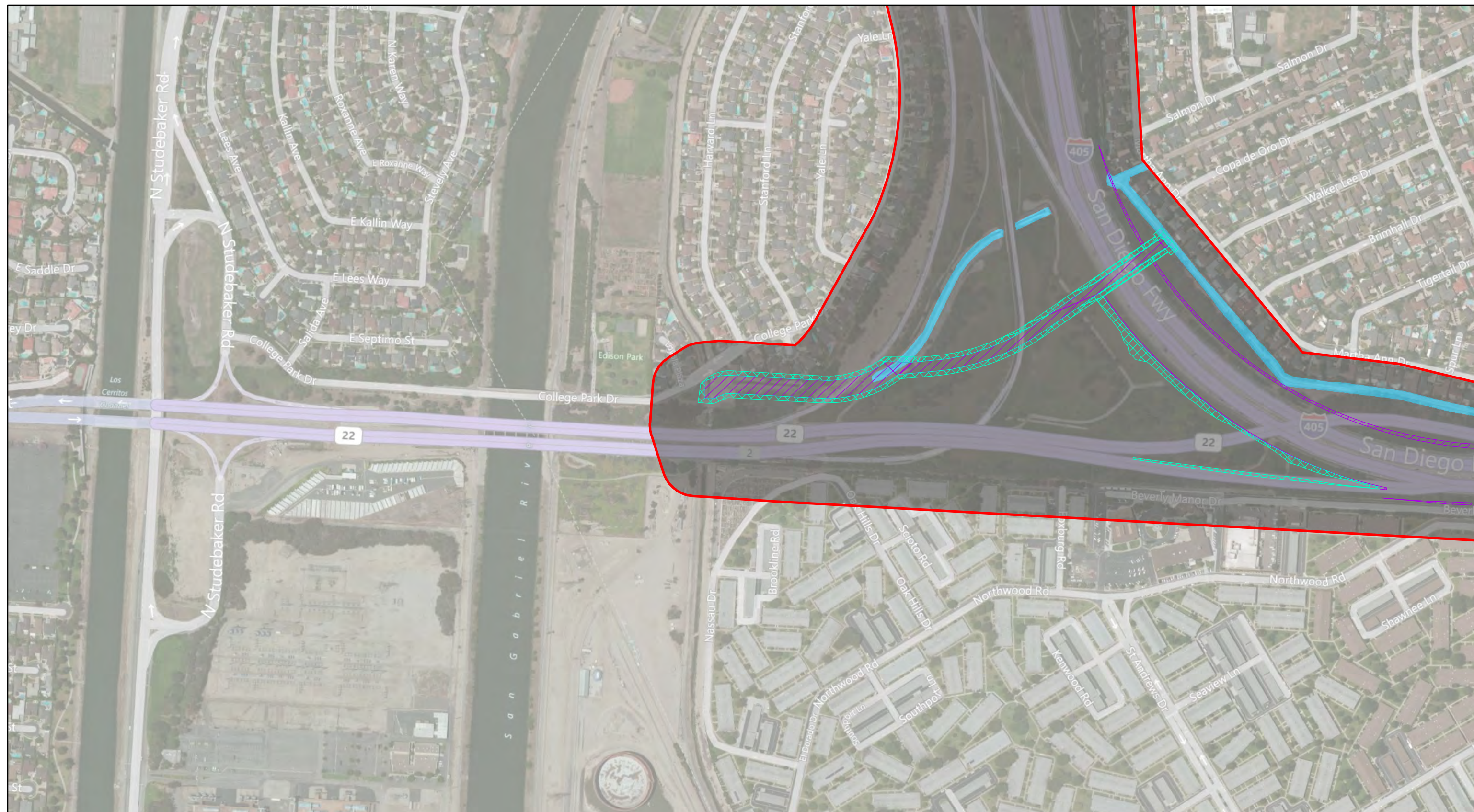
Vegetation Communities
Alternative 1
March 2012
Figure 3-20










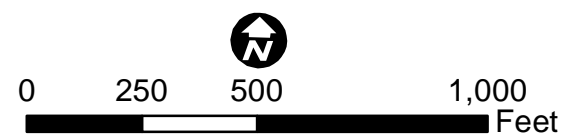


Vegetation Communities
Alternative 1
March 2012
Figure 3-22

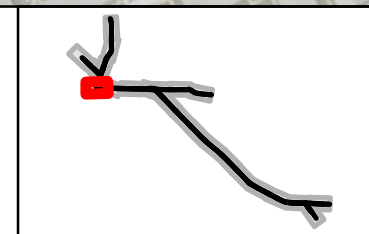




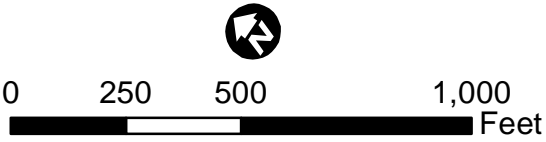
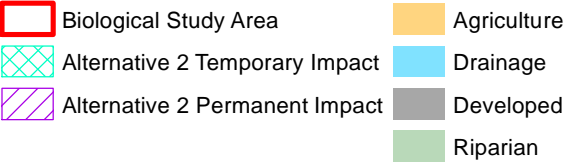
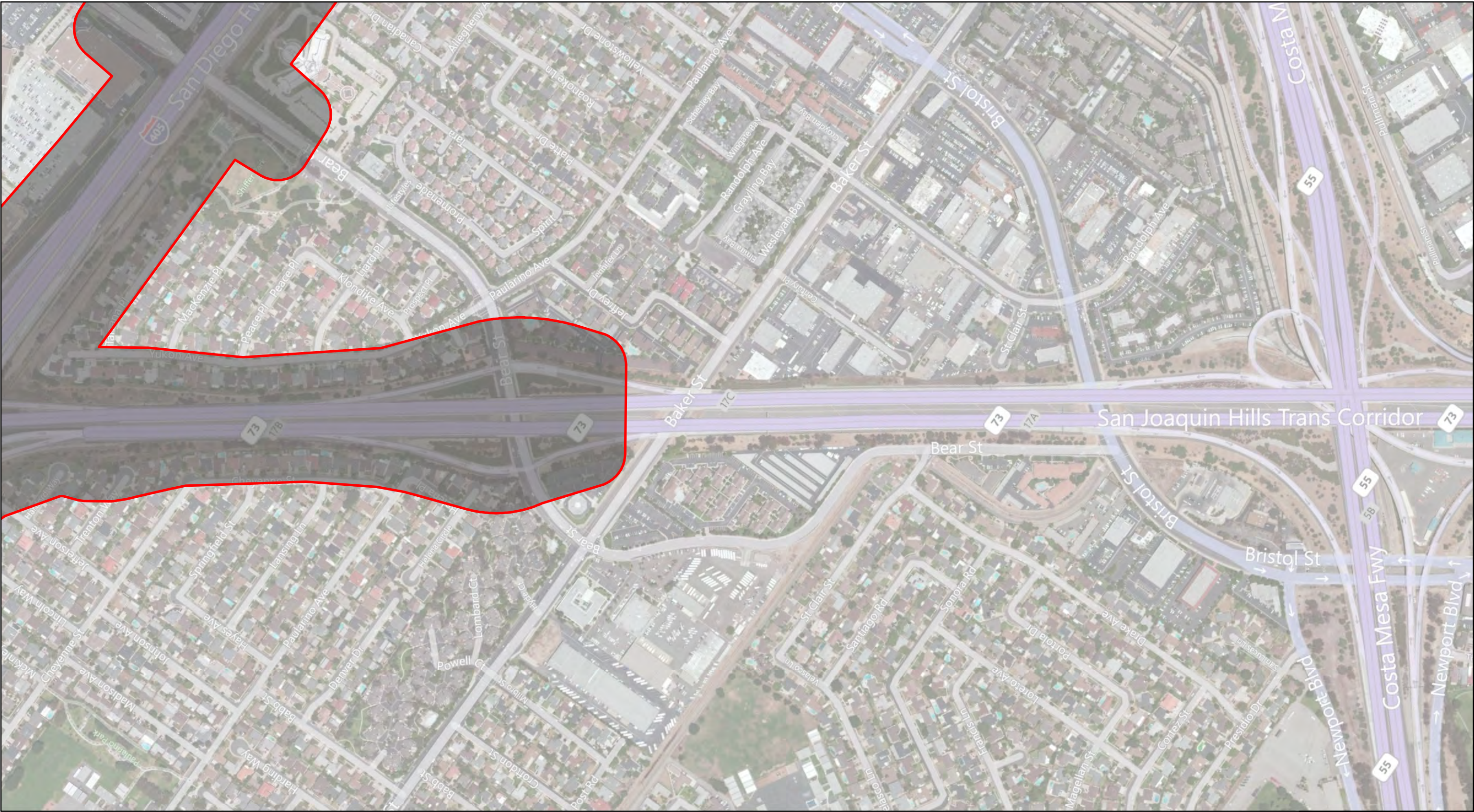
- | | |
|---|---|
|  Biological Study Area |  Agriculture |
|  Alternative 1 Temporary Impact |  Drainage |
|  Alternative 1 Permanent Impact |  Developed |
| |  Riparian |



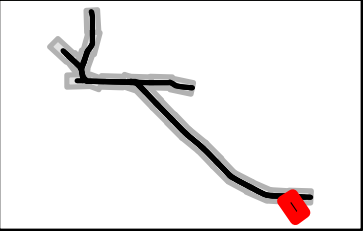
Vegetation Communities
Alternative 1
March 2012
 Figure 3-23



O3: Alternative 2 Vegetation Community Impacts

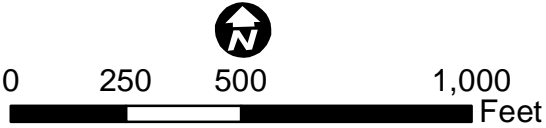


Vegetation Communities
Alternative 2
March 2012
Figure 4-1

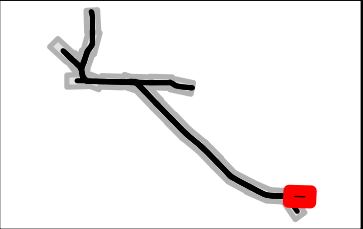


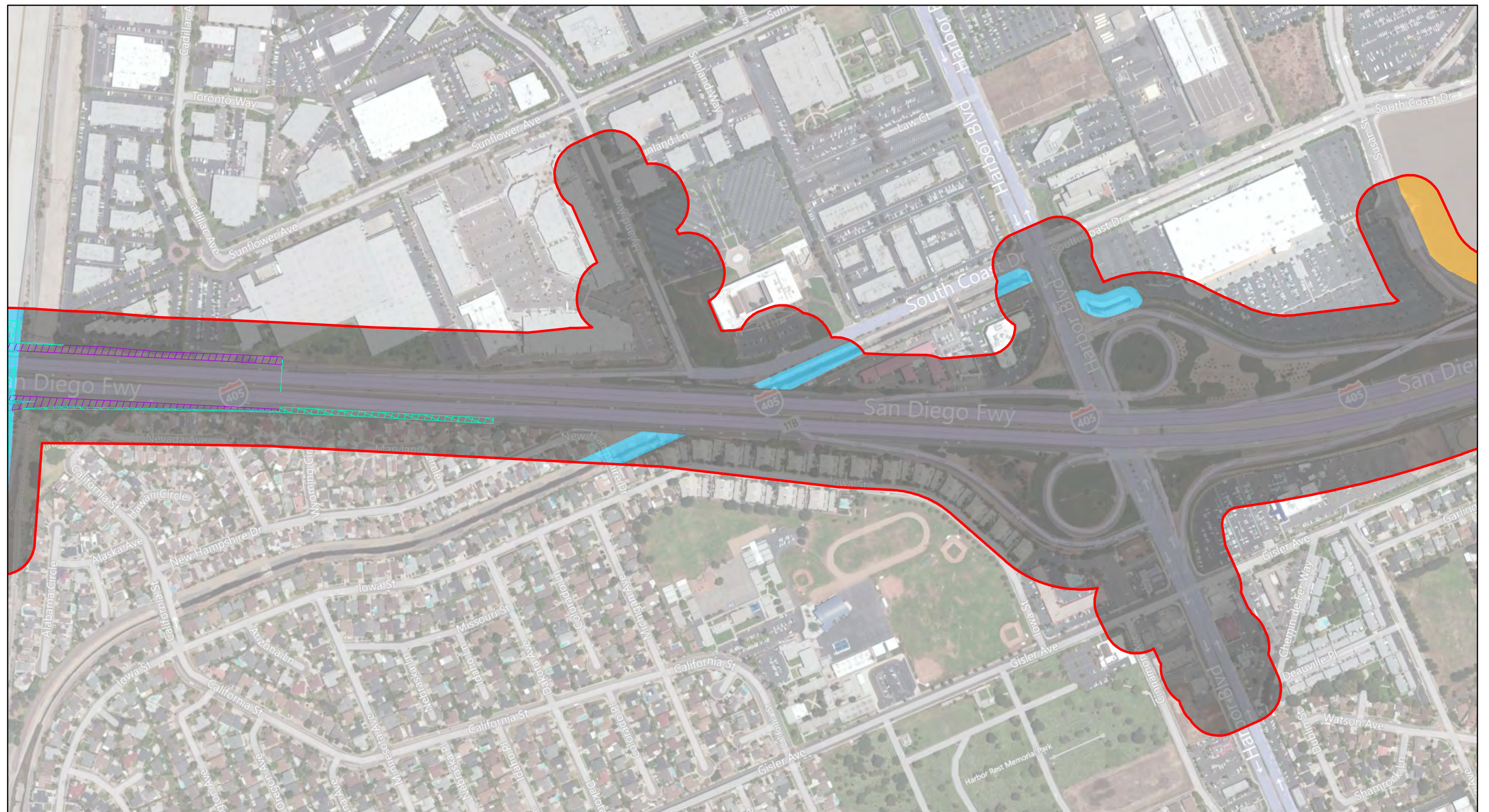


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 2 Temporary Impact | Drainage |
| Alternative 2 Permanent Impact | Developed |
| | Riparian |

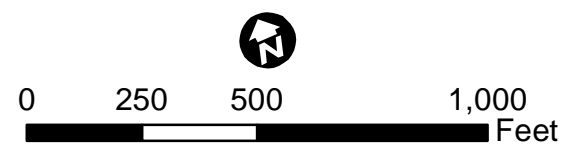


**Vegetation Communities
Alternative 2
March 2012**
Figure 4-2

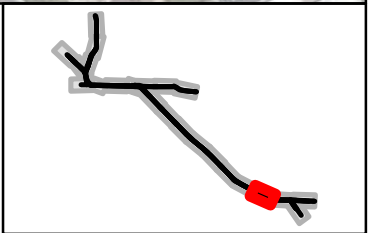


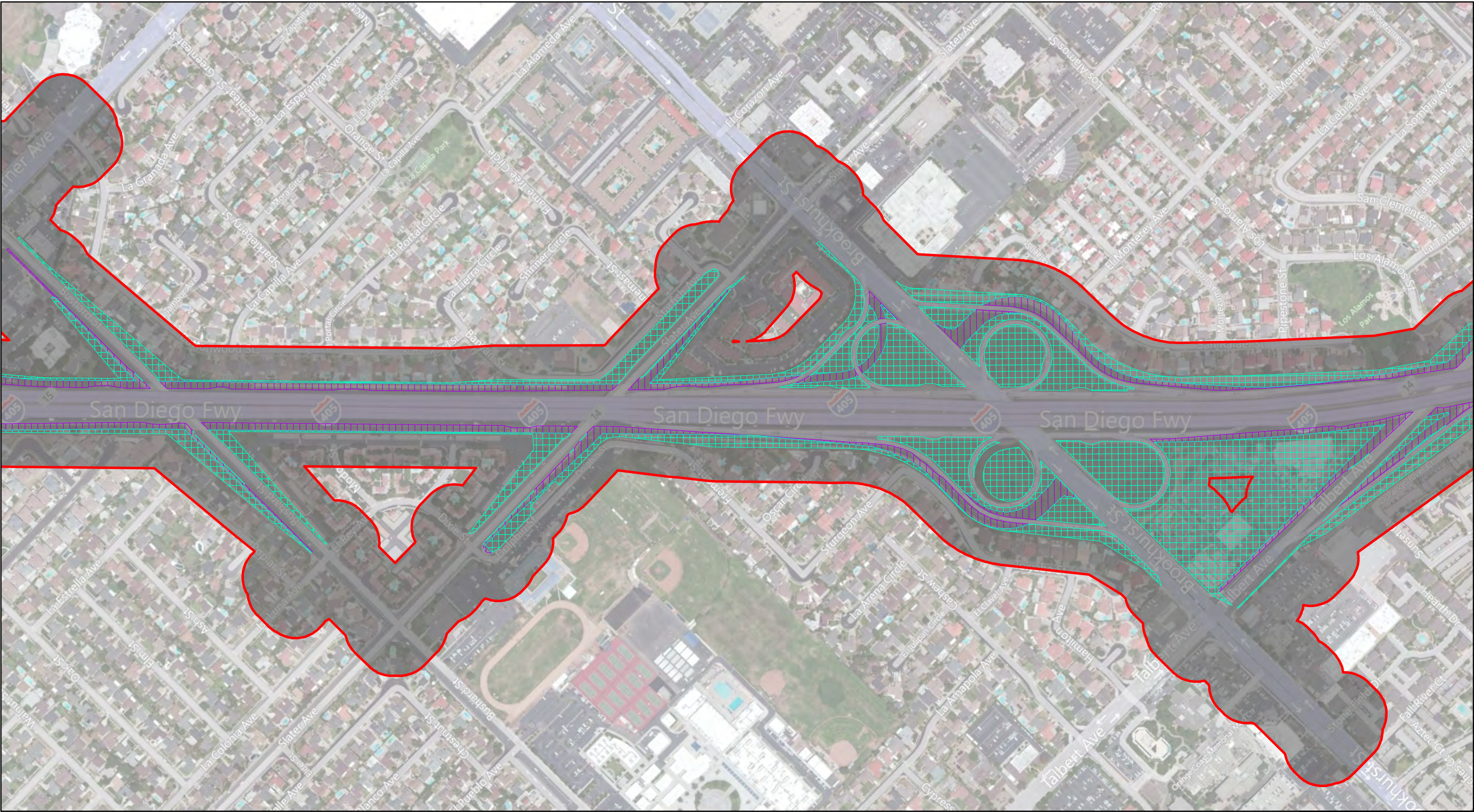









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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 2 Temporary Impact | Drainage |
| Alternative 2 Permanent Impact | Developed |
| | Riparian |

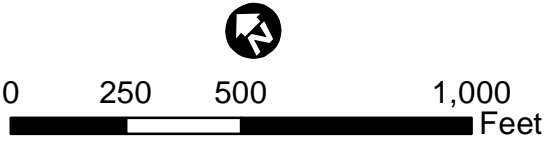


Vegetation Communities
Alternative 2
March 2012
 Figure 4-4

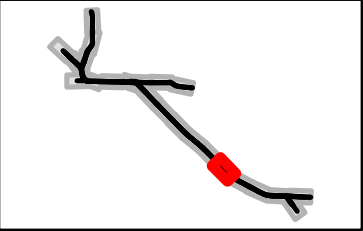


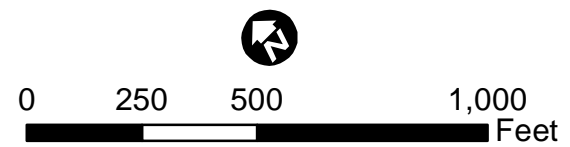
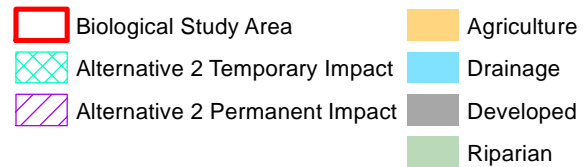
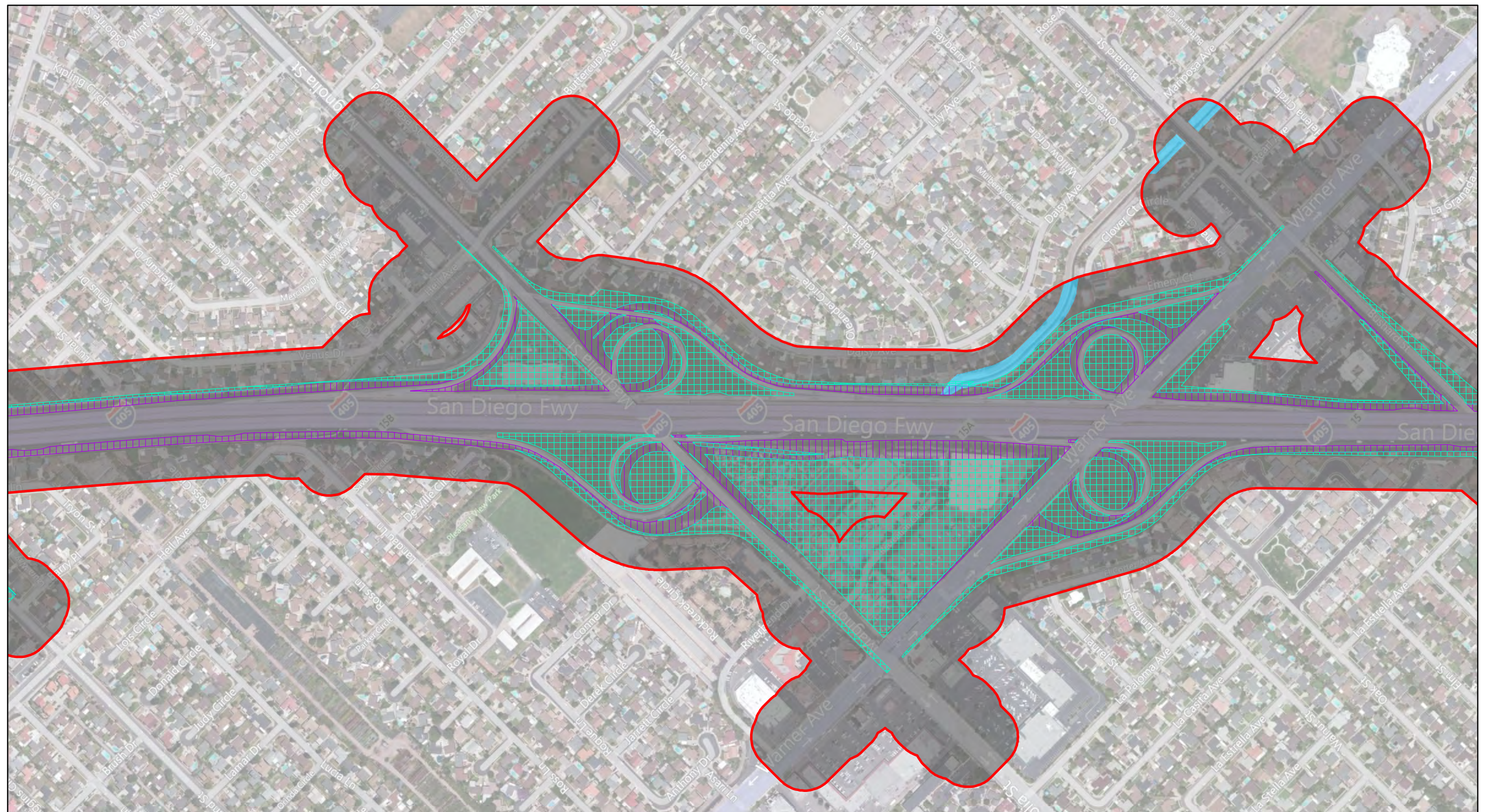


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|---|---|
|  Biological Study Area |  Agriculture |
|  Alternative 2 Temporary Impact |  Drainage |
|  Alternative 2 Permanent Impact |  Developed |
| |  Riparian |

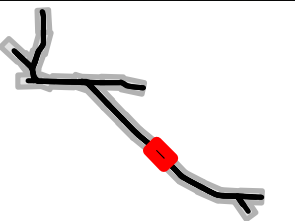


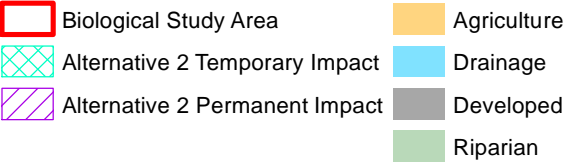
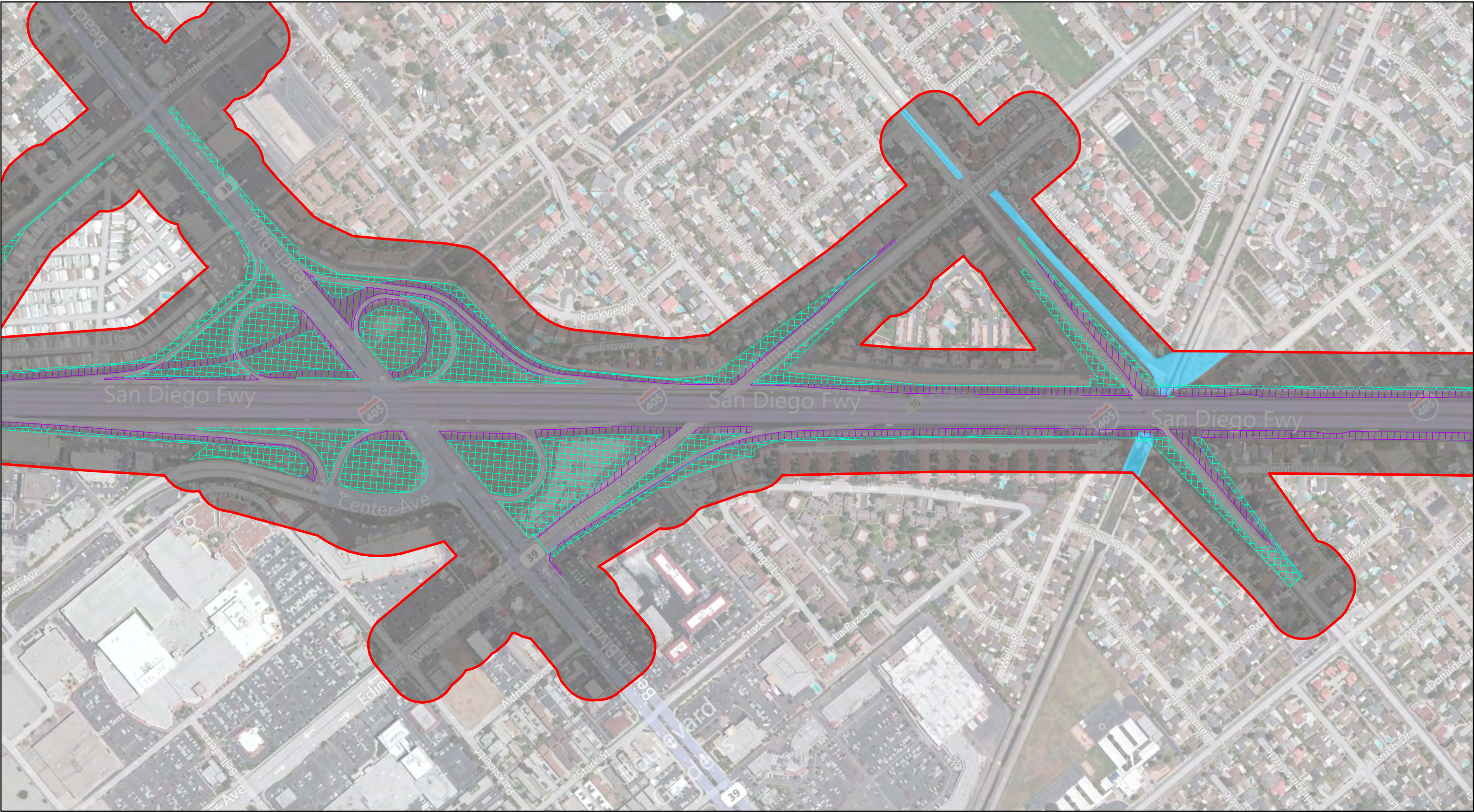
Vegetation Communities
Alternative 2
March 2012
Figure 4-6



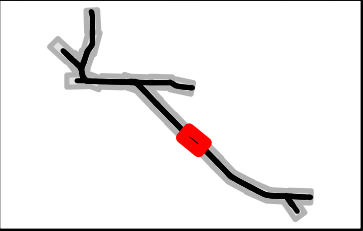


Vegetation Communities
Alternative 2
March 2012
Figure 4-7










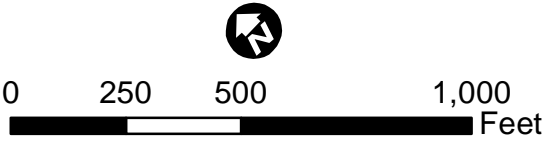


Vegetation Communities
Alternative 2
March 2012
Figure 4-8

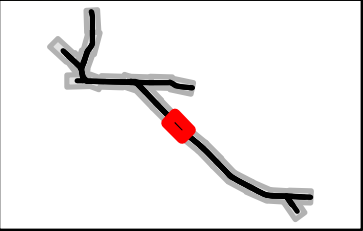


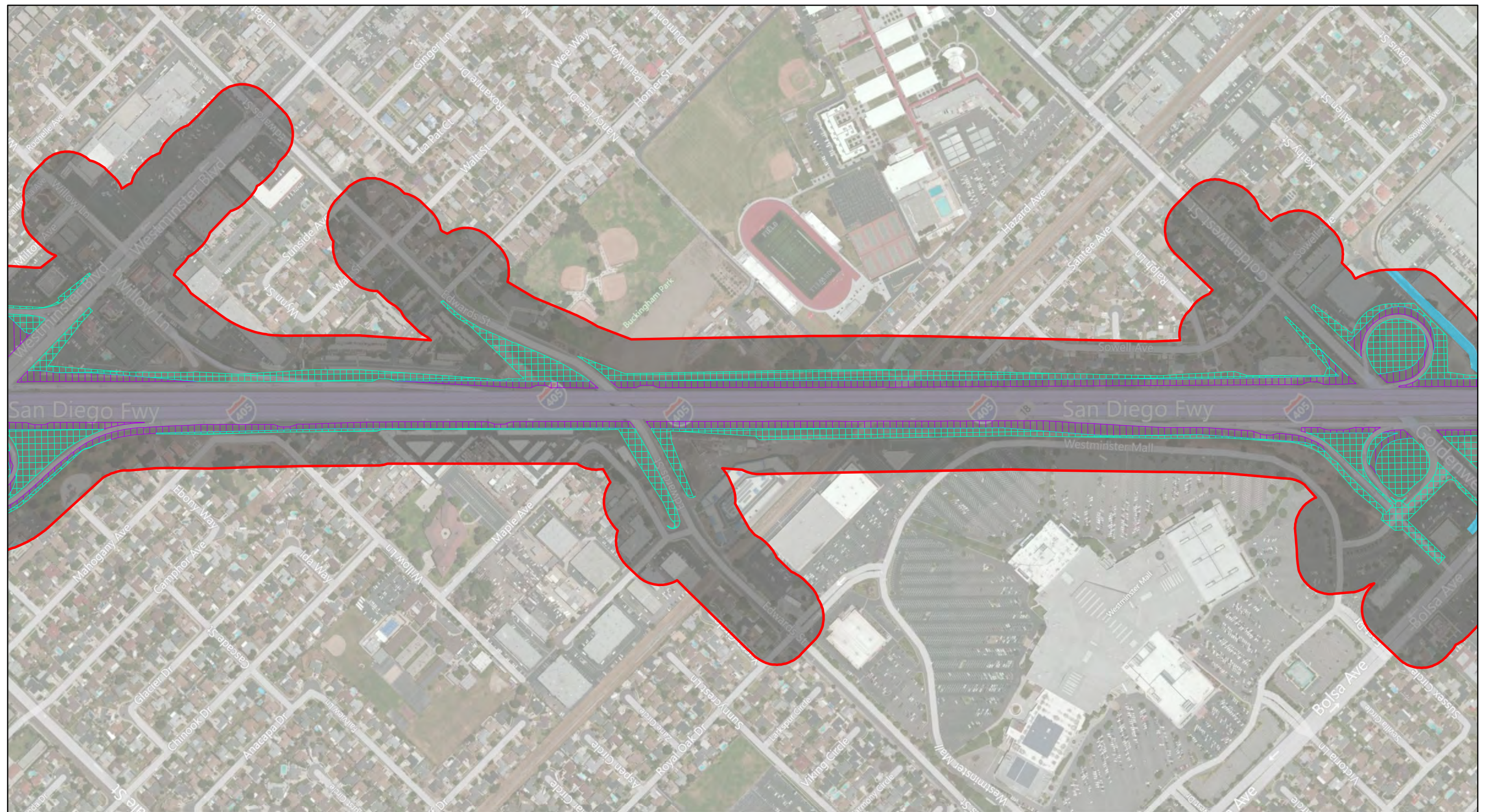


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|---|---|
|  Biological Study Area |  Agriculture |
|  Alternative 2 Temporary Impact |  Drainage |
|  Alternative 2 Permanent Impact |  Developed |
| |  Riparian |

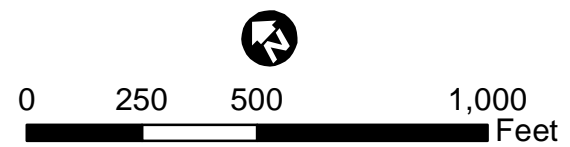


Vegetation Communities
Alternative 2
March 2012
Figure 4-9

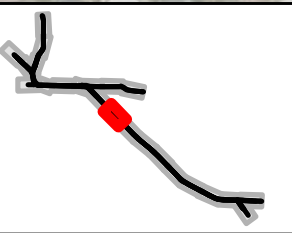


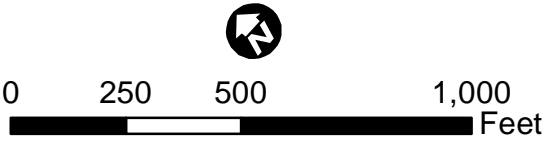
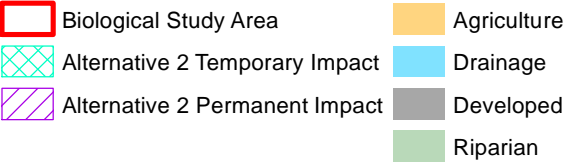
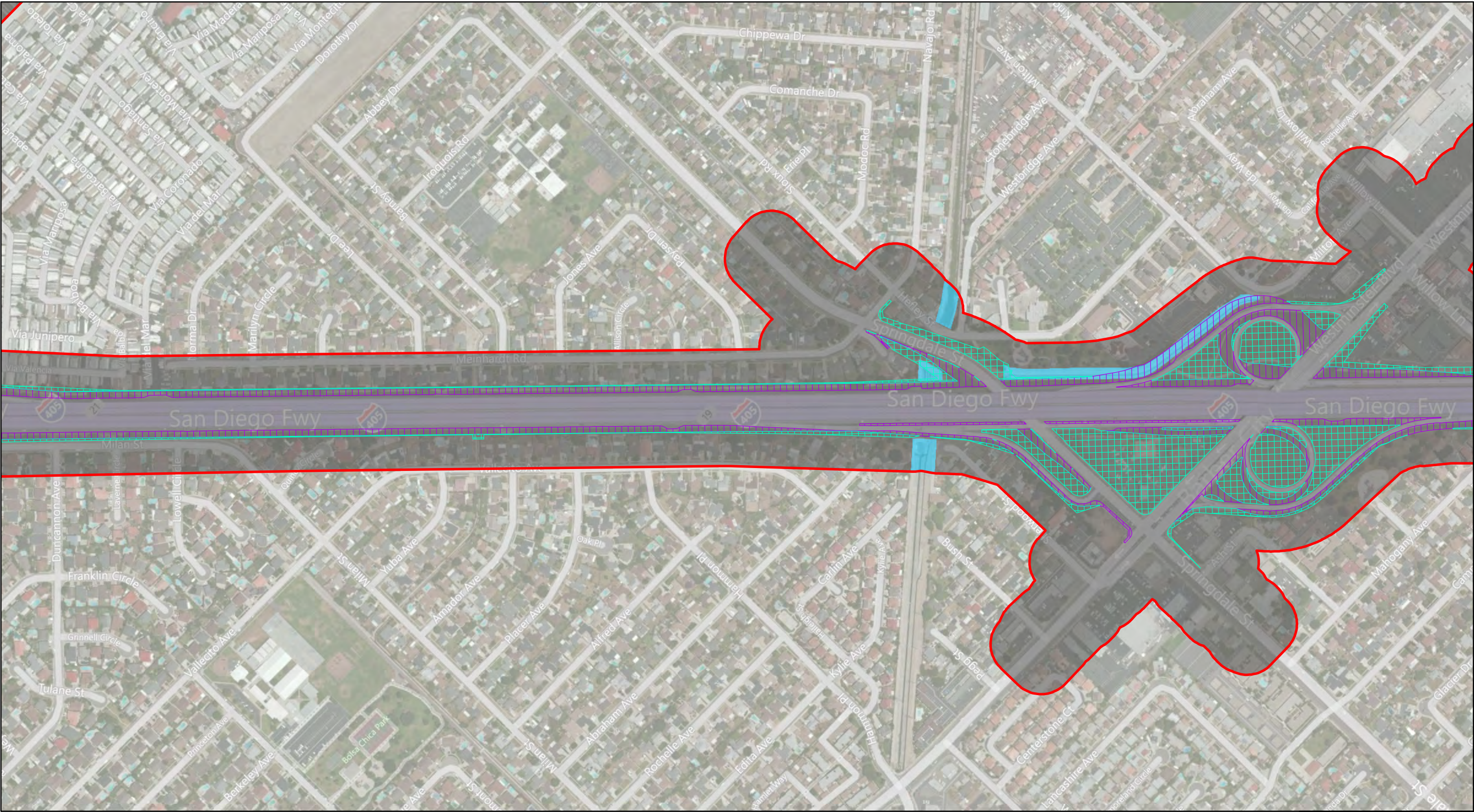


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 2 Temporary Impact | Drainage |
| Alternative 2 Permanent Impact | Developed |
| | Riparian |

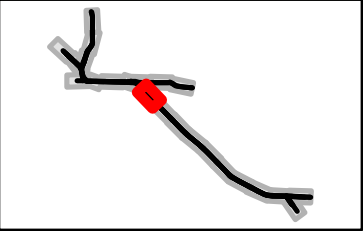


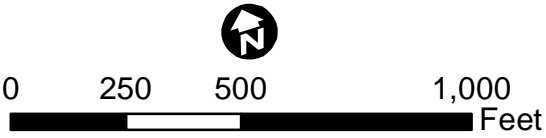
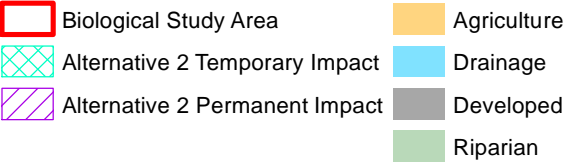
Vegetation Communities
Alternative 2
March 2012
 Figure 4-10



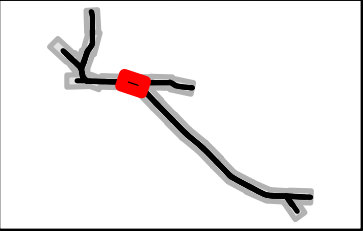


Vegetation Communities
Alternative 2
March 2012
Figure 4-11



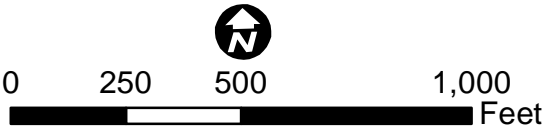


Vegetation Communities
Alternative 2
March 2012
Figure 4-12

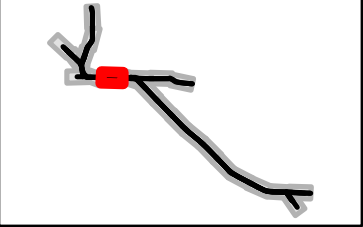


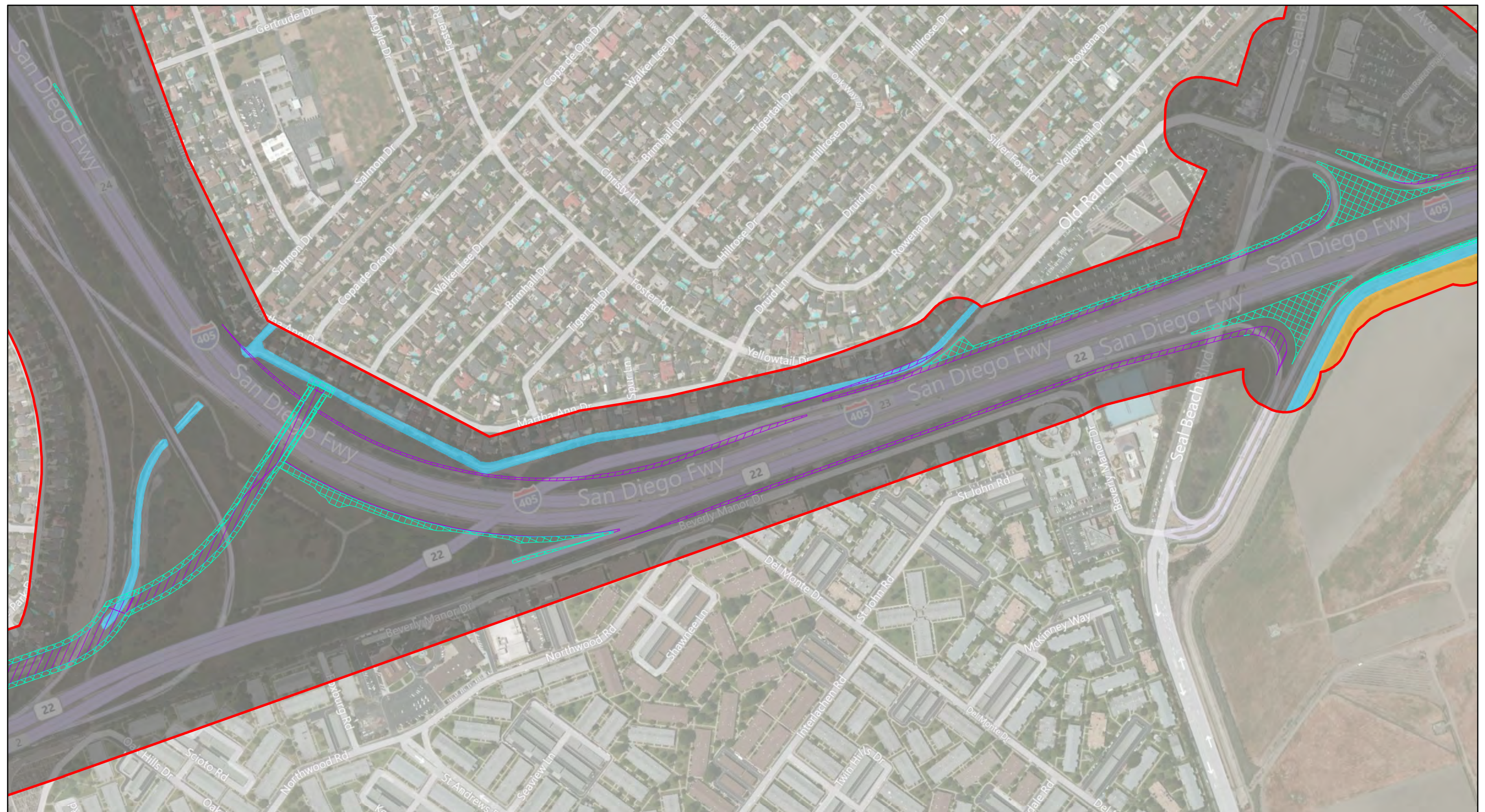


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 2 Temporary Impact | Drainage |
| Alternative 2 Permanent Impact | Developed |
| | Riparian |

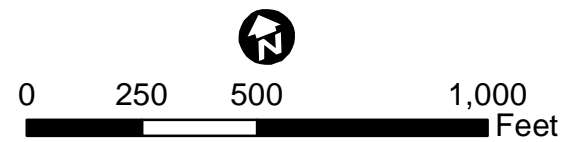


Vegetation Communities
Alternative 2
March 2012
Figure 4-13

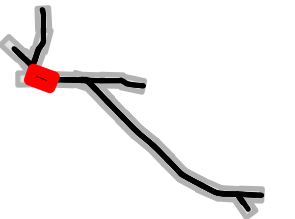


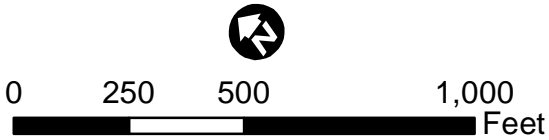
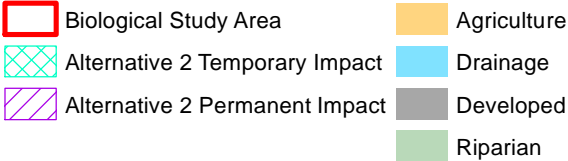


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| Biological Study Area | Agriculture |
| Alternative 2 Temporary Impact | Drainage |
| Alternative 2 Permanent Impact | Developed |
| | Riparian |

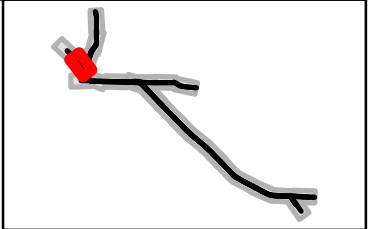


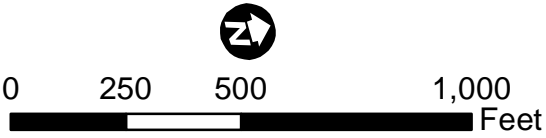
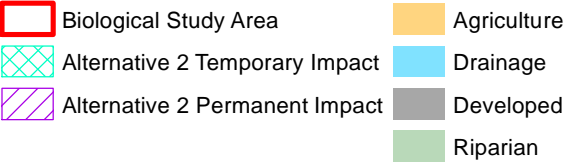
Vegetation Communities
Alternative 2
March 2012
 Figure 4-14



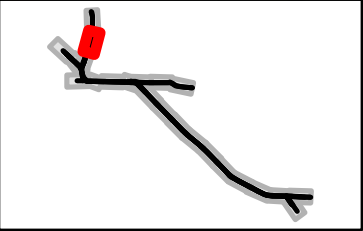


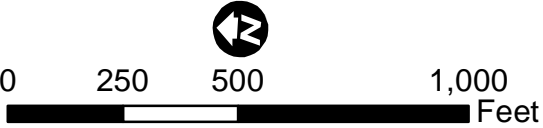
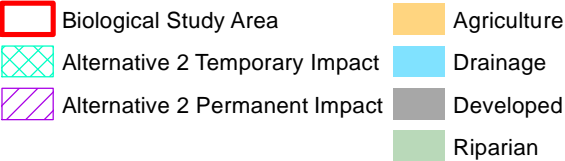
**Vegetation Communities
Alternative 2
March 2012**
Figure 4-15



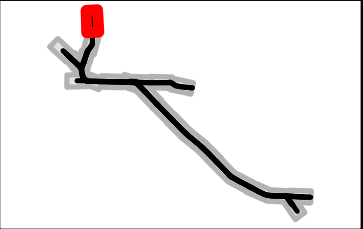


Vegetation Communities
Alternative 2
March 2012
Figure 4-17










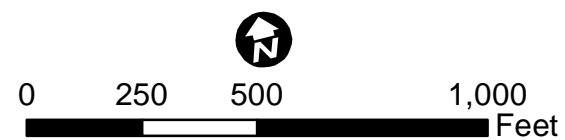


Vegetation Communities
Alternative 2
March 2012
Figure 4-18

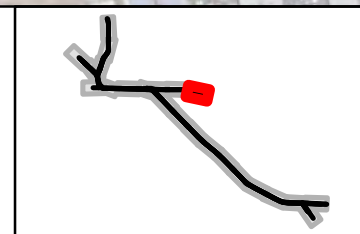


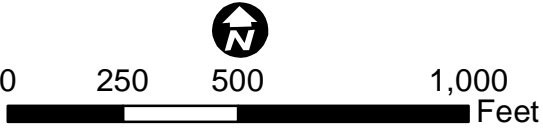
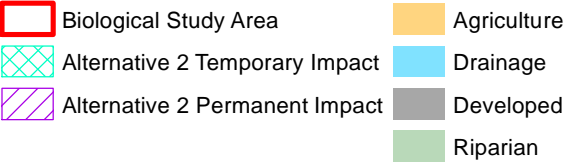


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|---|---|
|  Biological Study Area |  Agriculture |
|  Alternative 2 Temporary Impact |  Drainage |
|  Alternative 2 Permanent Impact |  Developed |
| |  Riparian |

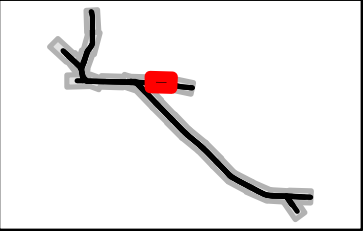


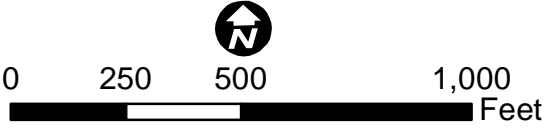
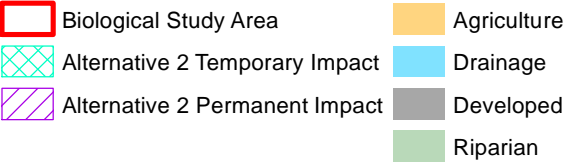
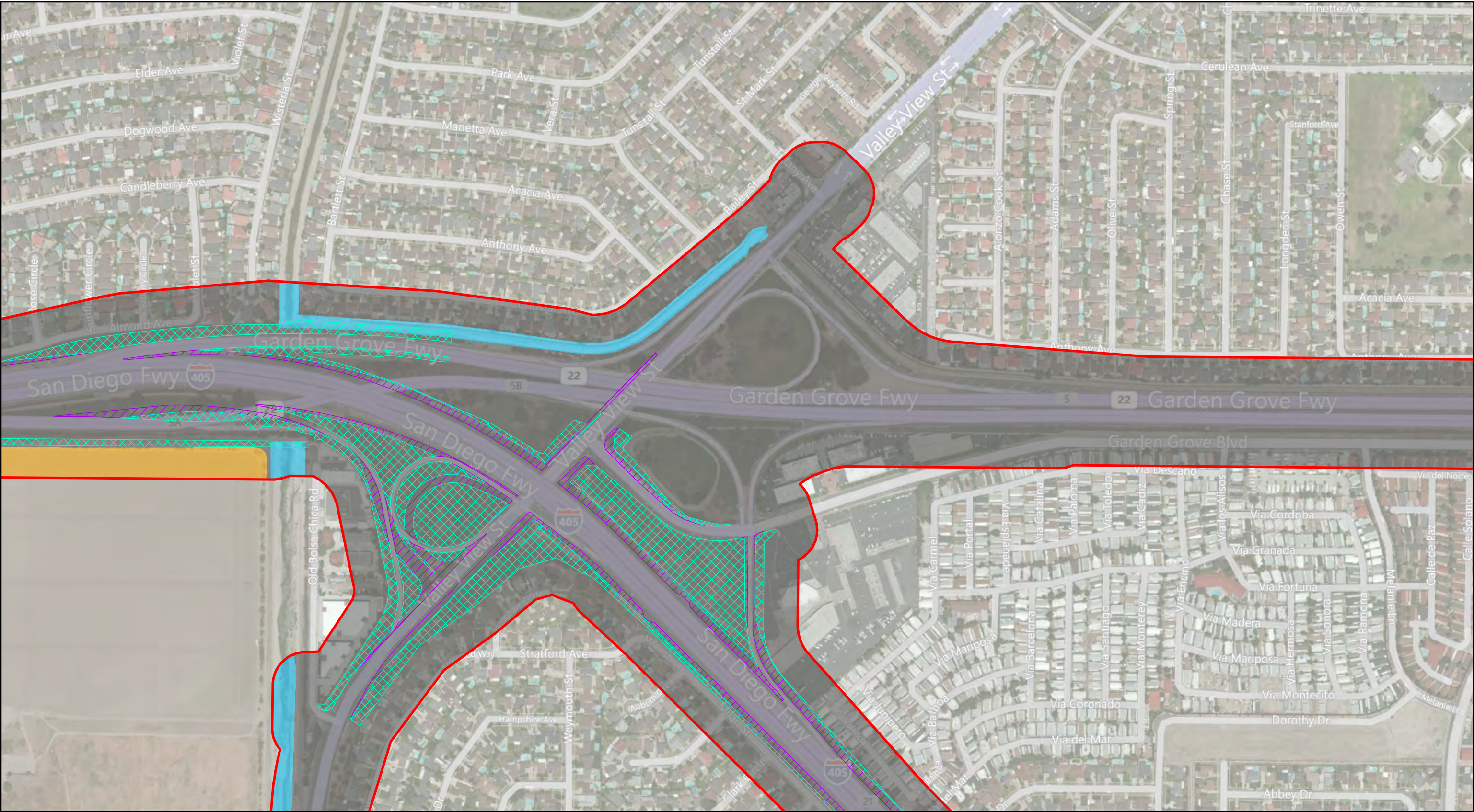
Vegetation Communities
Alternative 2
March 2012
 Figure 4-19



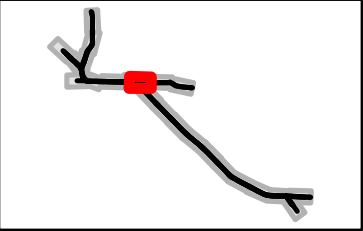


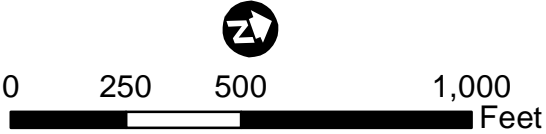
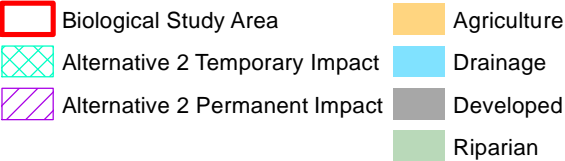
Vegetation Communities
Alternative 2
March 2012
Figure 4-20



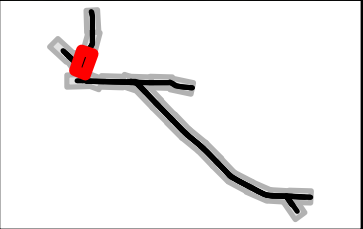


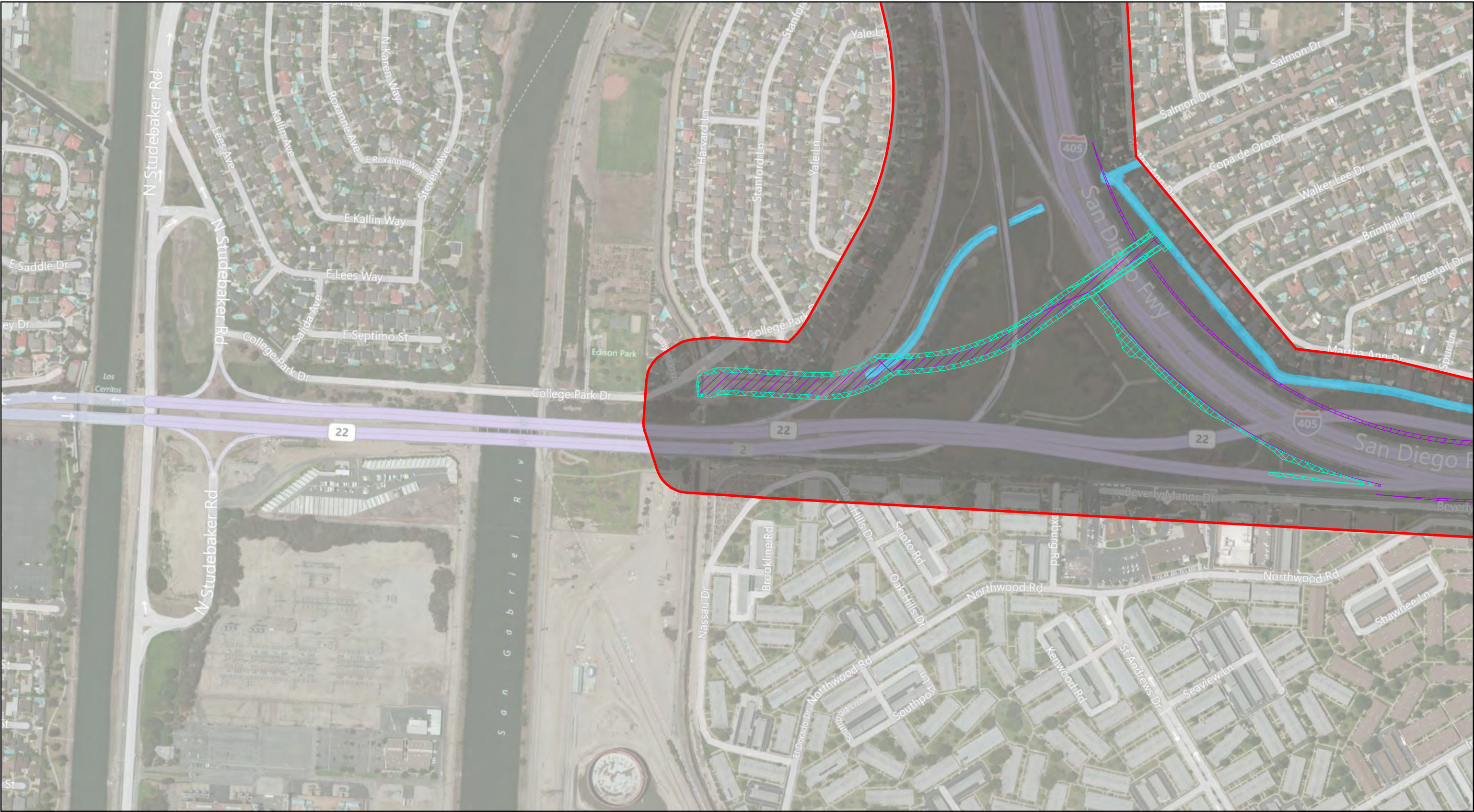
Vegetation Communities
Alternative 2
March 2012
Figure 4-21



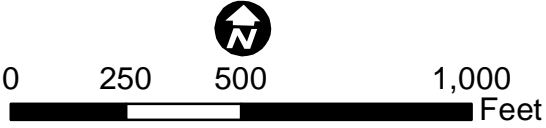


Vegetation Communities
Alternative 2
March 2012
Figure 4-22

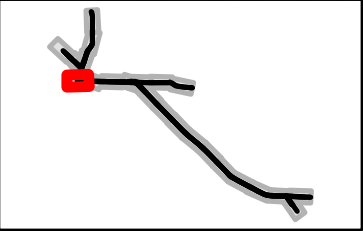




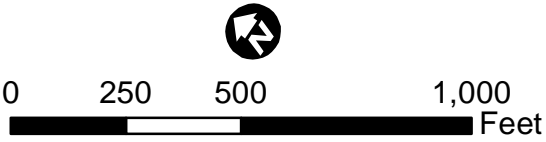
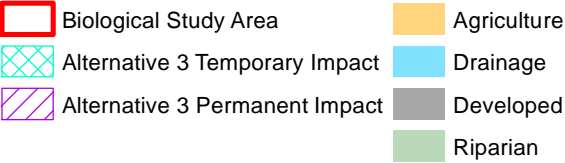
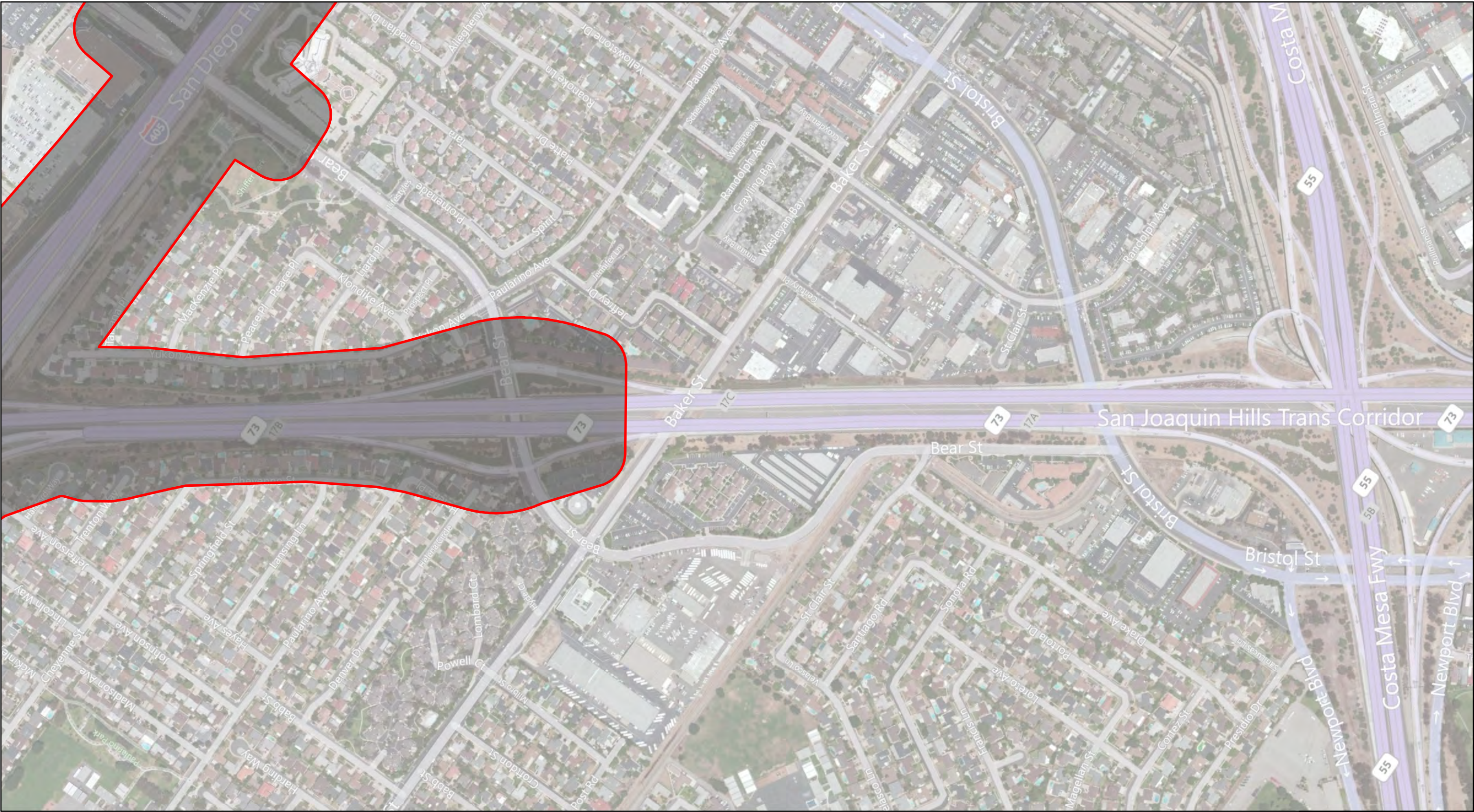
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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 2 Temporary Impact | Drainage |
| Alternative 2 Permanent Impact | Developed |
| | Riparian |



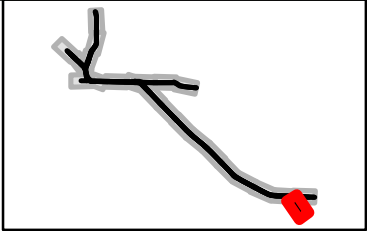
Vegetation Communities
Alternative 2
March 2012
Figure 4-23

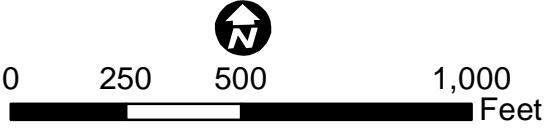
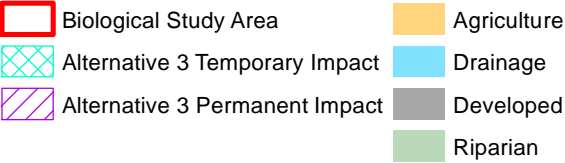


04: Alternative 3 Vegetation Community Impacts

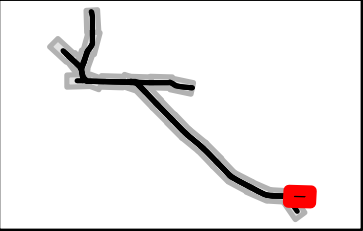


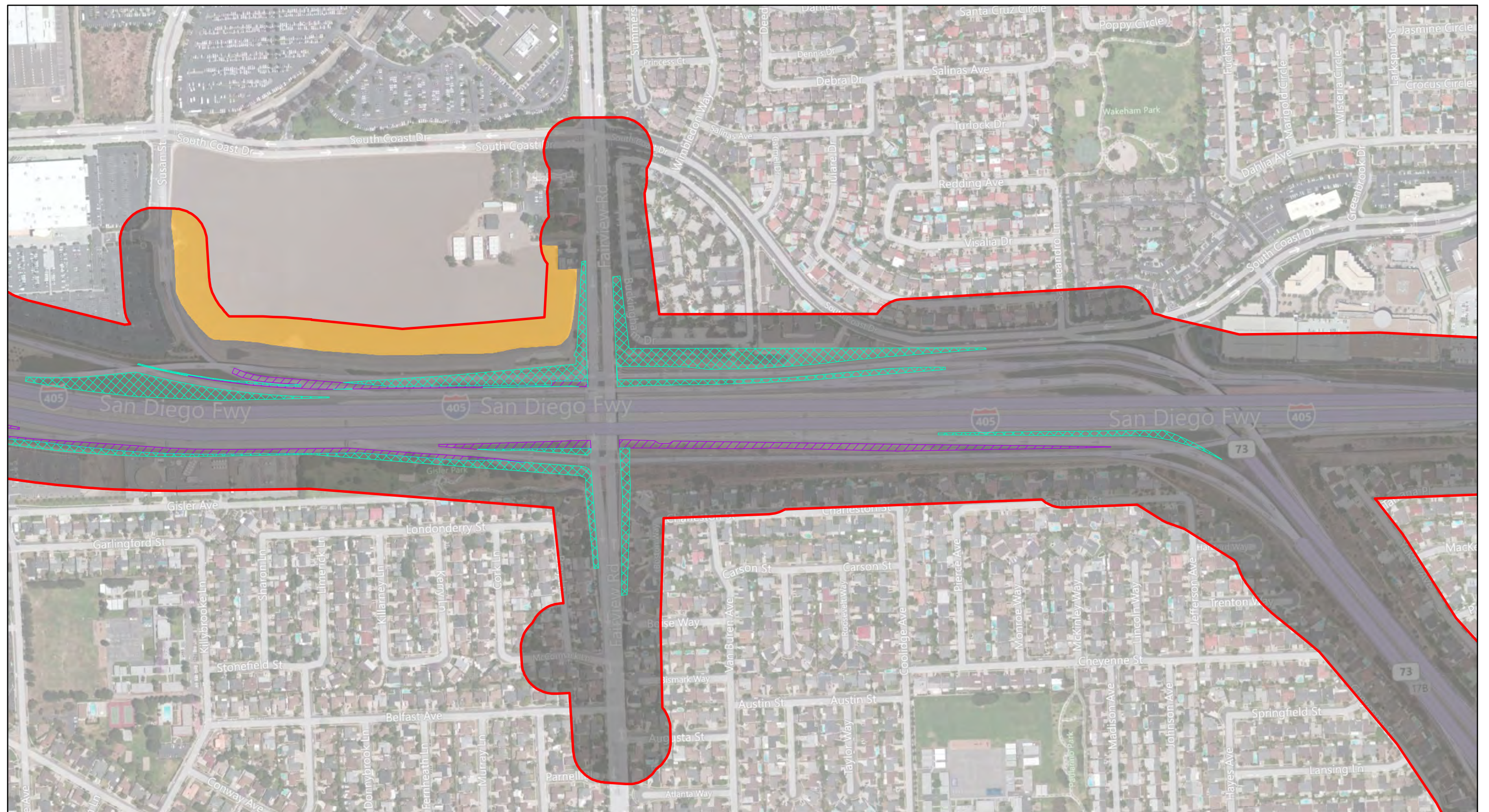
**Vegetation Communities
Alternative 3
March 2012**
Figure 5-1



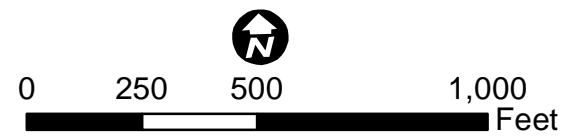


Vegetation Communities
Alternative 3
March 2012
Figure 5-2

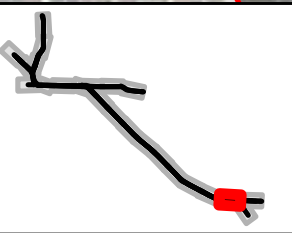


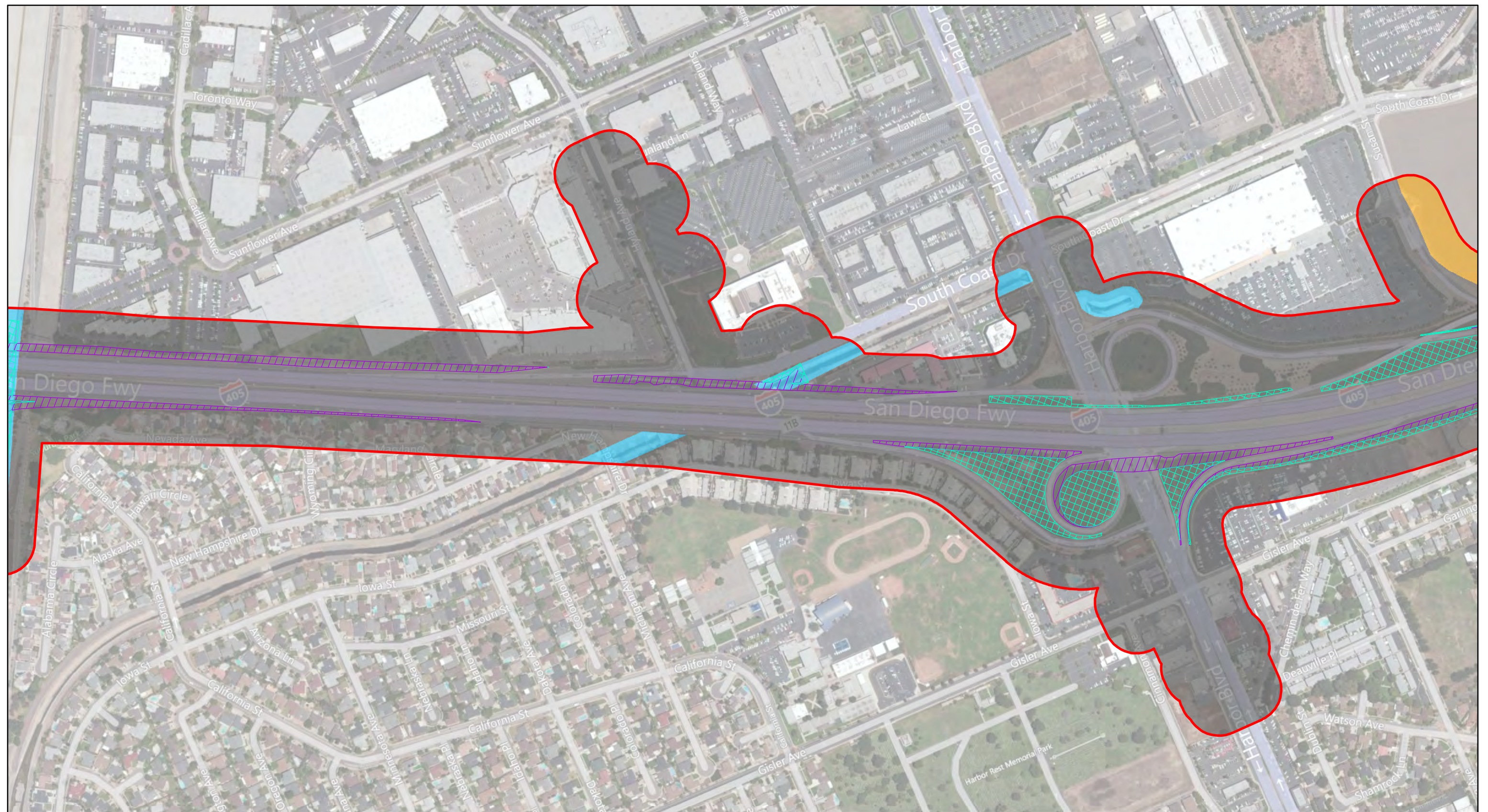


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|---|--|
| Biological Study Area | Agriculture |
| Alternative 3 Temporary Impact | Drainage |
| Alternative 3 Permanent Impact | Developed |
| | Riparian |

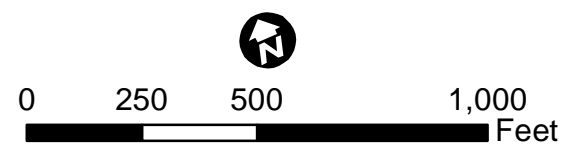


Vegetation Communities
Alternative 3
March 2012
 Figure 5-3

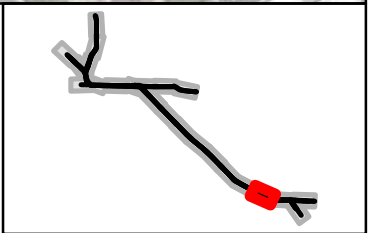


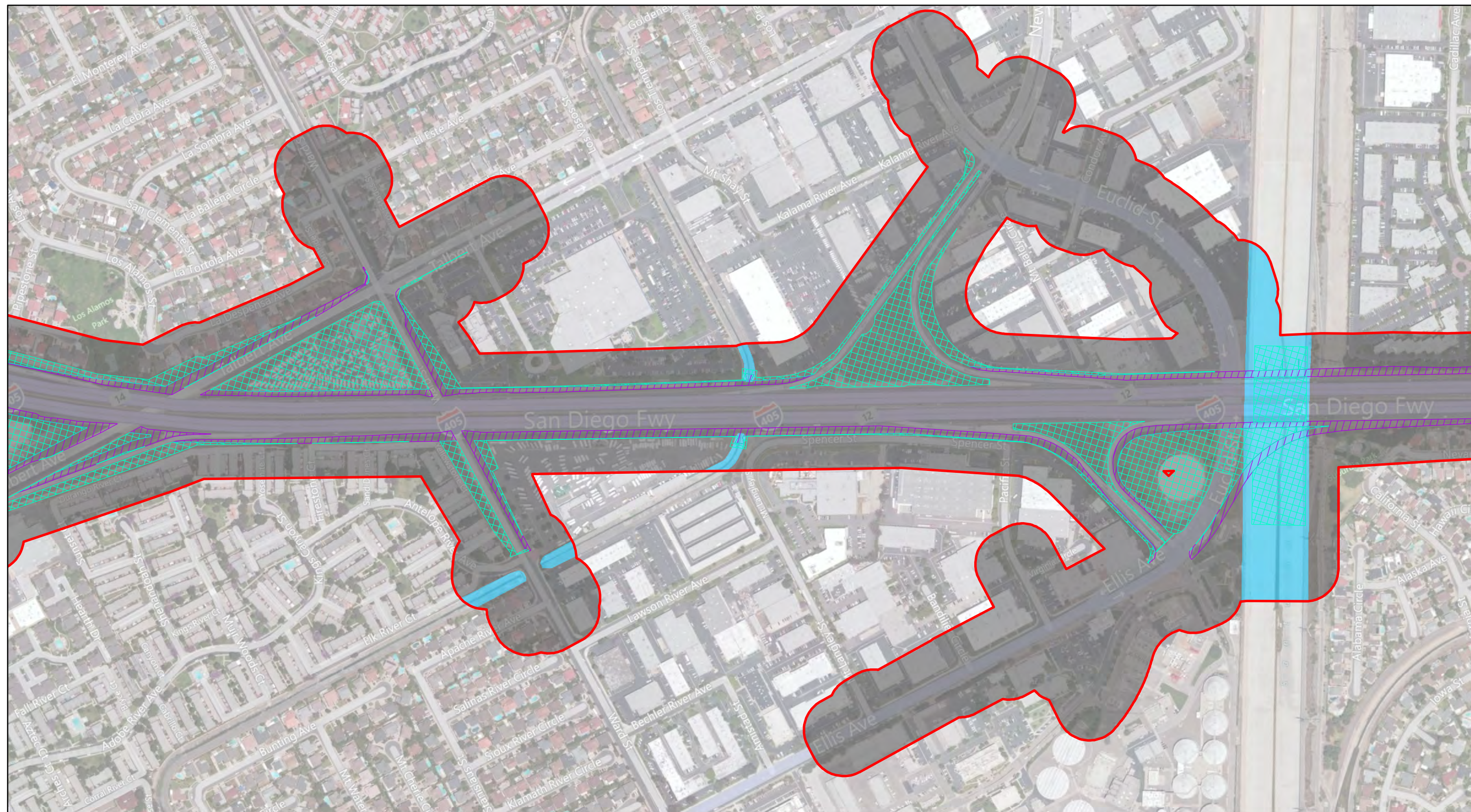


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| Biological Study Area | Agriculture |
| Alternative 3 Temporary Impact | Drainage |
| Alternative 3 Permanent Impact | Developed |
| | Riparian |

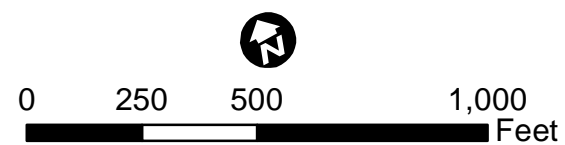


**Vegetation Communities
Alternative 3
March 2012**
Figure 5-4

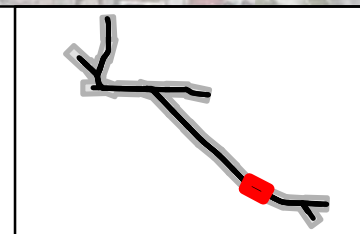


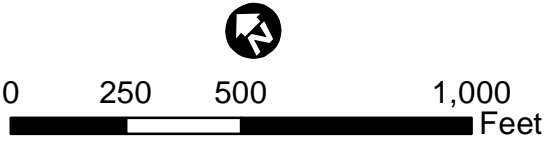
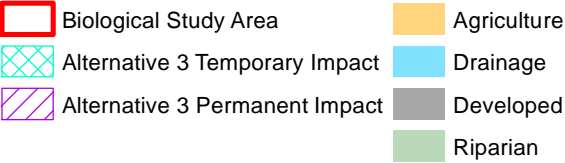
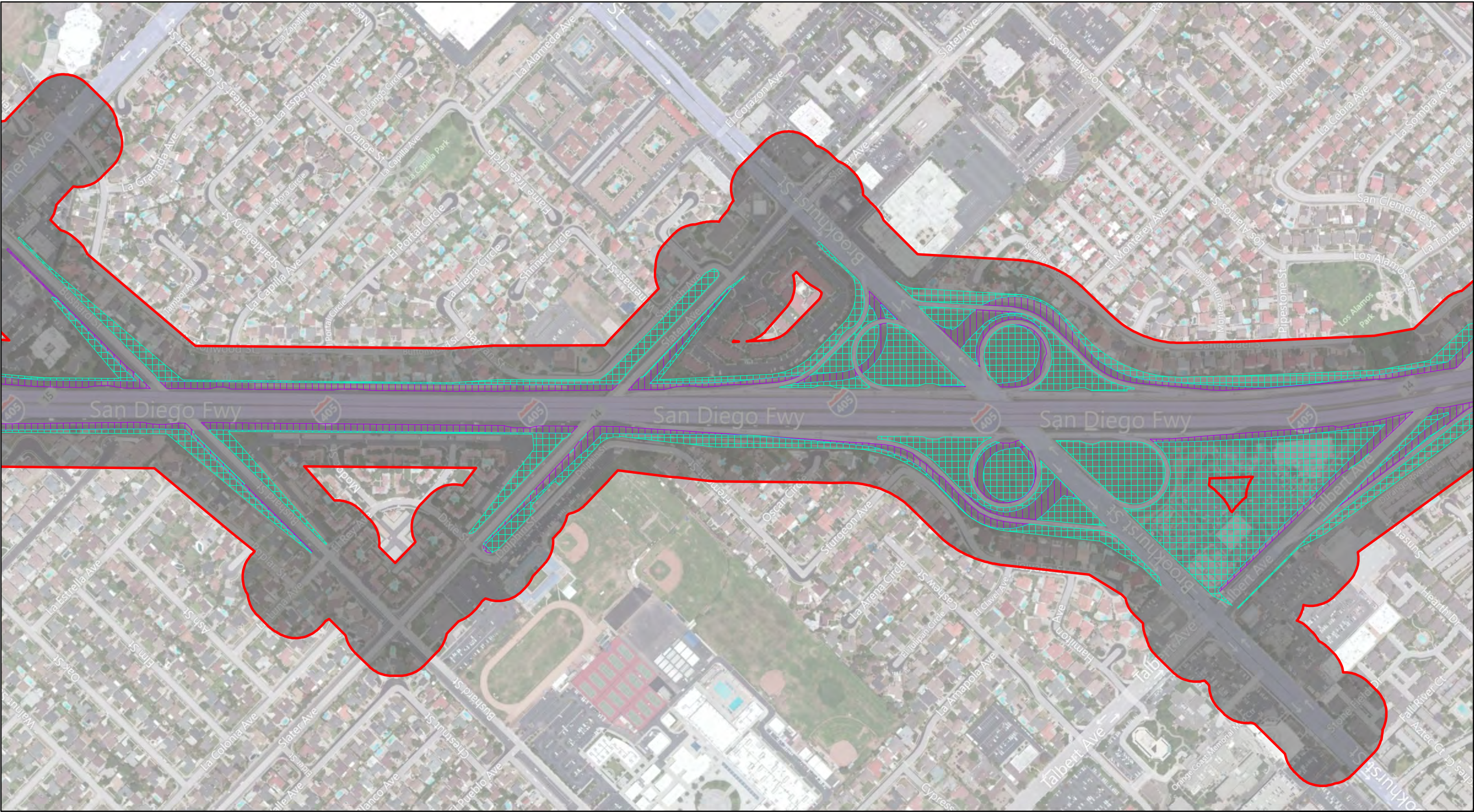


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 3 Temporary Impact | Drainage |
| Alternative 3 Permanent Impact | Developed |
| | Riparian |

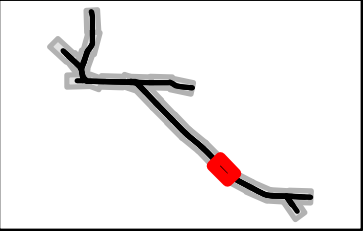


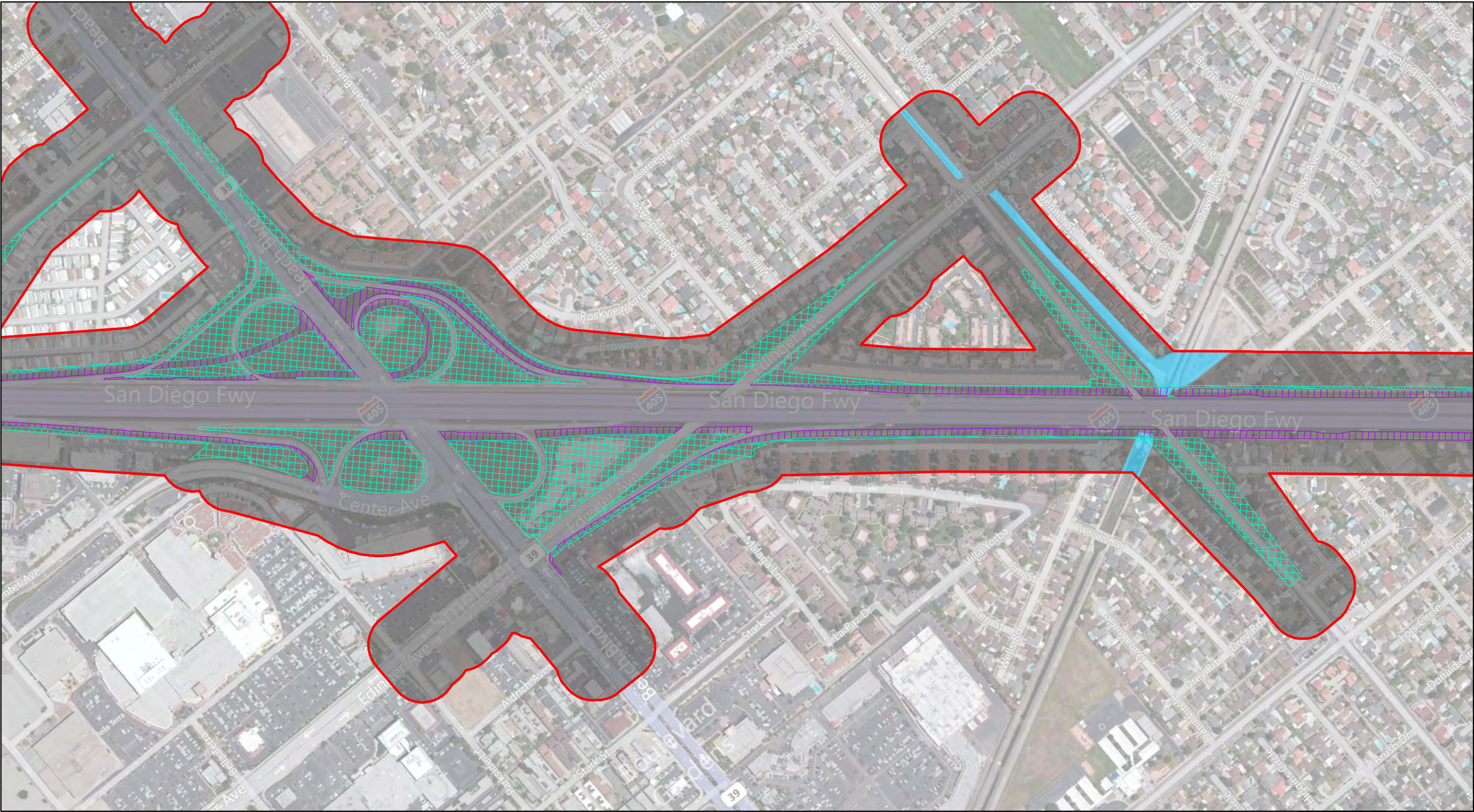
Vegetation Communities
Alternative 3
March 2012
 Figure 5-5



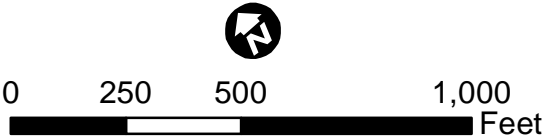


Vegetation Communities
Alternative 3
March 2012
Figure 5-6

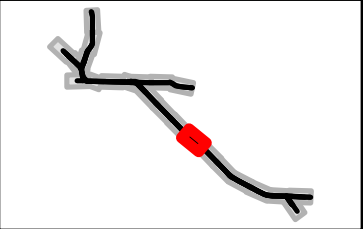


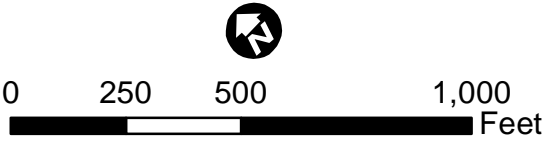
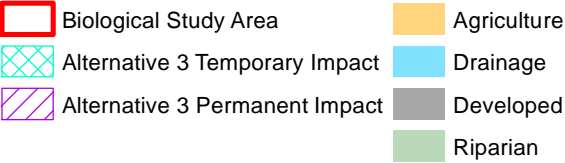


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 3 Temporary Impact | Drainage |
| Alternative 3 Permanent Impact | Developed |
| | Riparian |

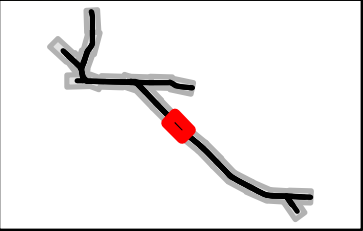


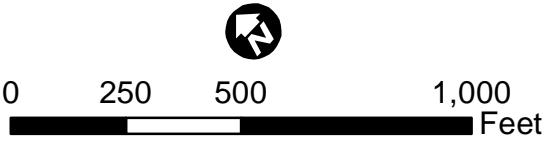
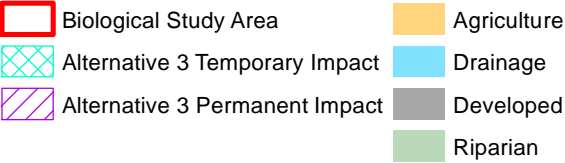
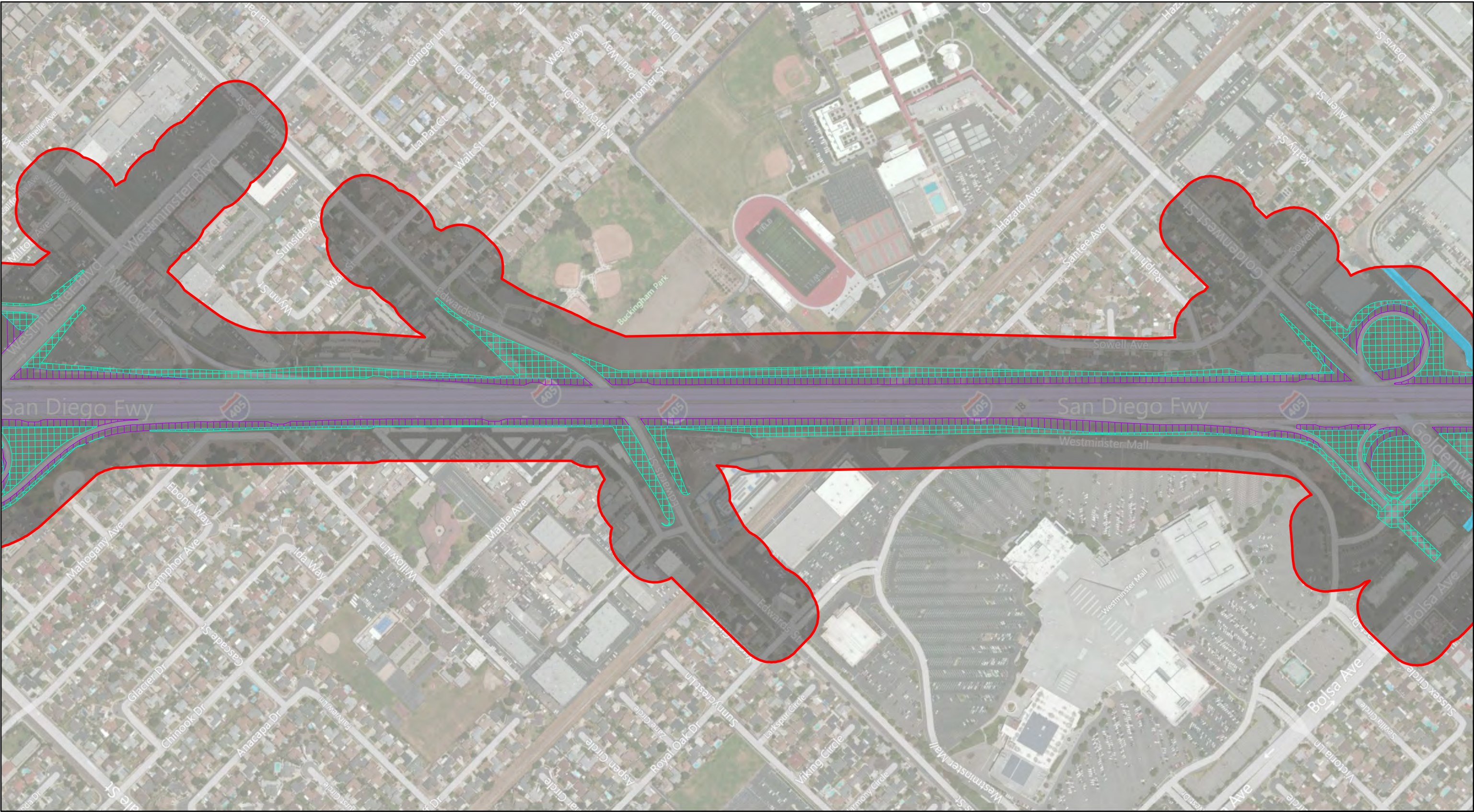
Vegetation Communities
Alternative 3
March 2012
Figure 5-8



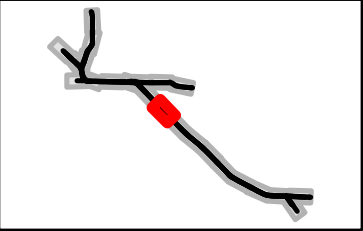


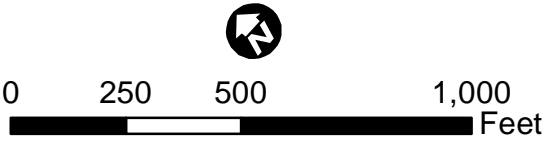
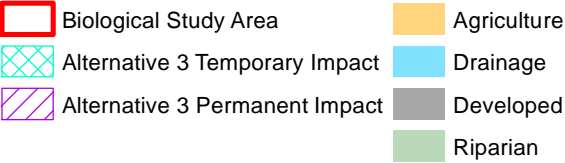
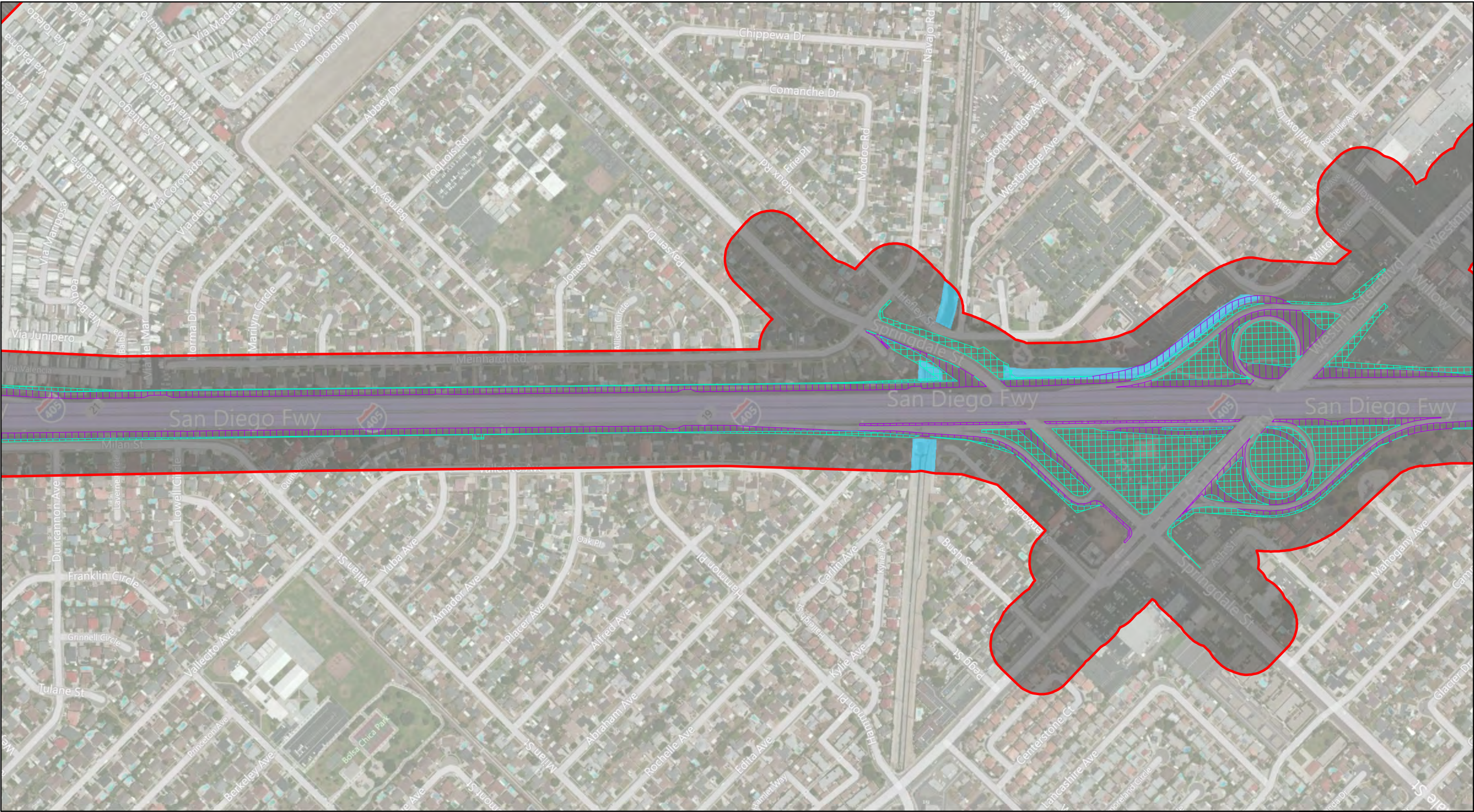
Vegetation Communities
Alternative 3
March 2012
Figure 5-9



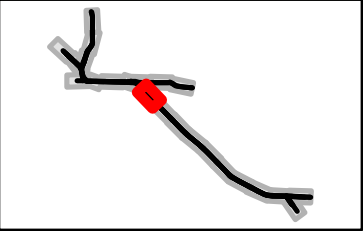


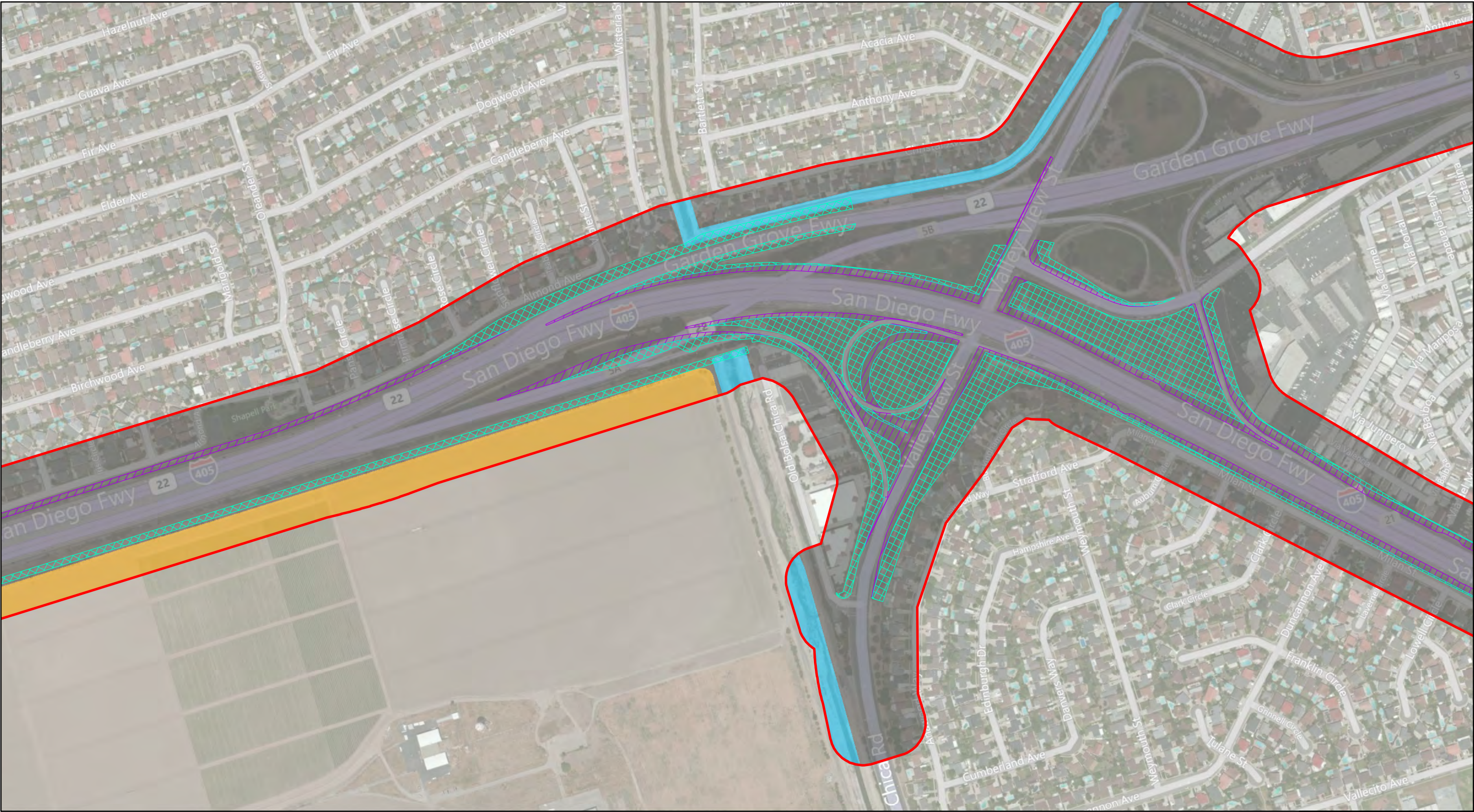
**Vegetation Communities
Alternative 3
March 2012**
Figure 5-10



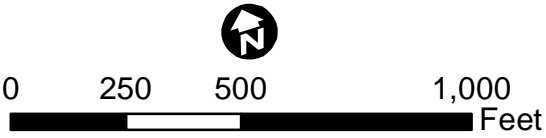


Vegetation Communities
Alternative 3
March 2012
Figure 5-11

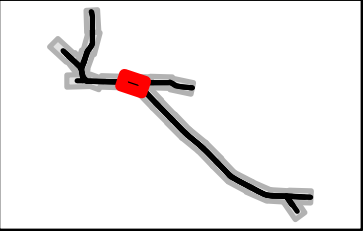











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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 3 Temporary Impact | Drainage |
| Alternative 3 Permanent Impact | Developed |
| | Riparian |



Vegetation Communities
Alternative 3
March 2012
Figure 5-12

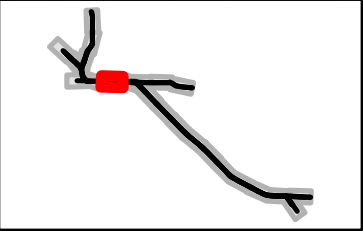


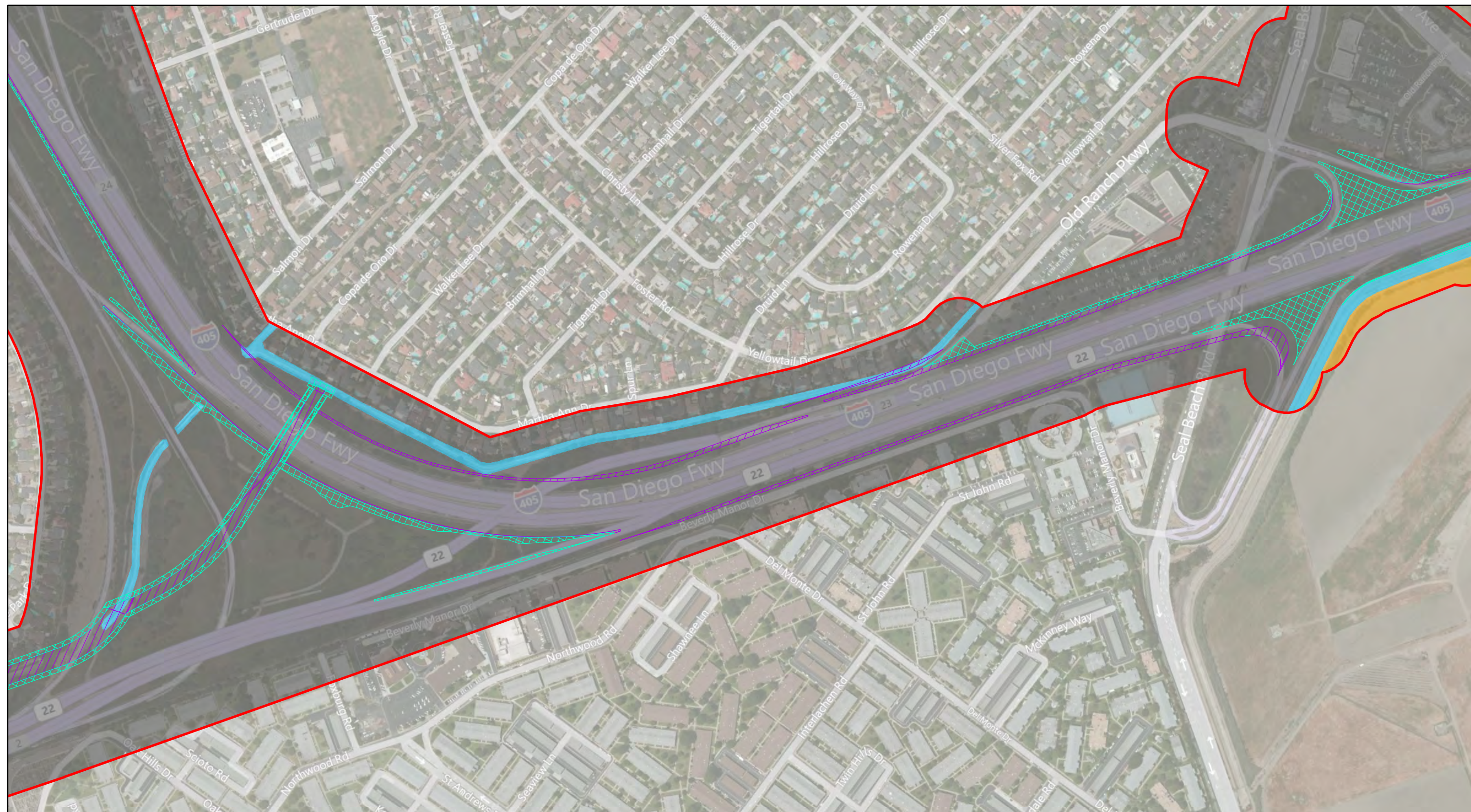


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|---|---|
|  Biological Study Area |  Agriculture |
|  Alternative 3 Temporary Impact |  Drainage |
|  Alternative 3 Permanent Impact |  Developed |
| |  Riparian |

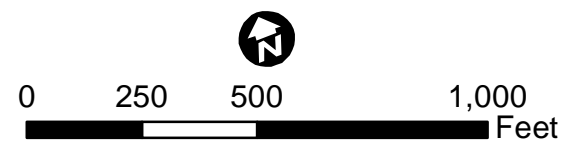


Vegetation Communities
Alternative 3
March 2012
Figure 5-13

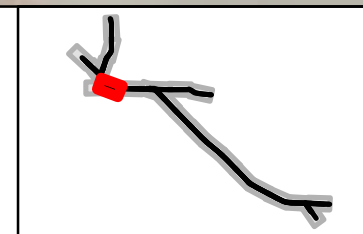


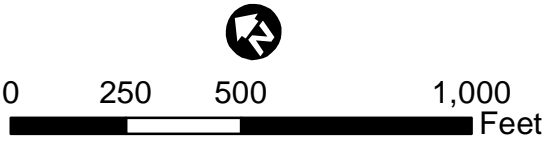
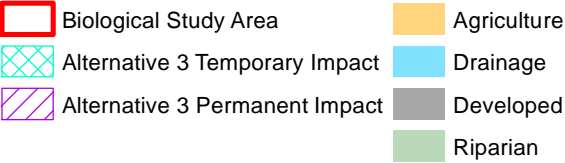


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|---|--|
| Biological Study Area | Agriculture |
| Alternative 3 Temporary Impact | Drainage |
| Alternative 3 Permanent Impact | Developed |
| | Riparian |

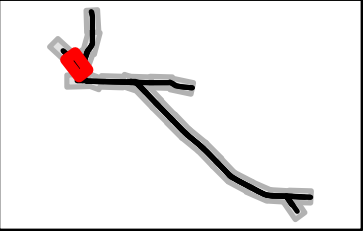


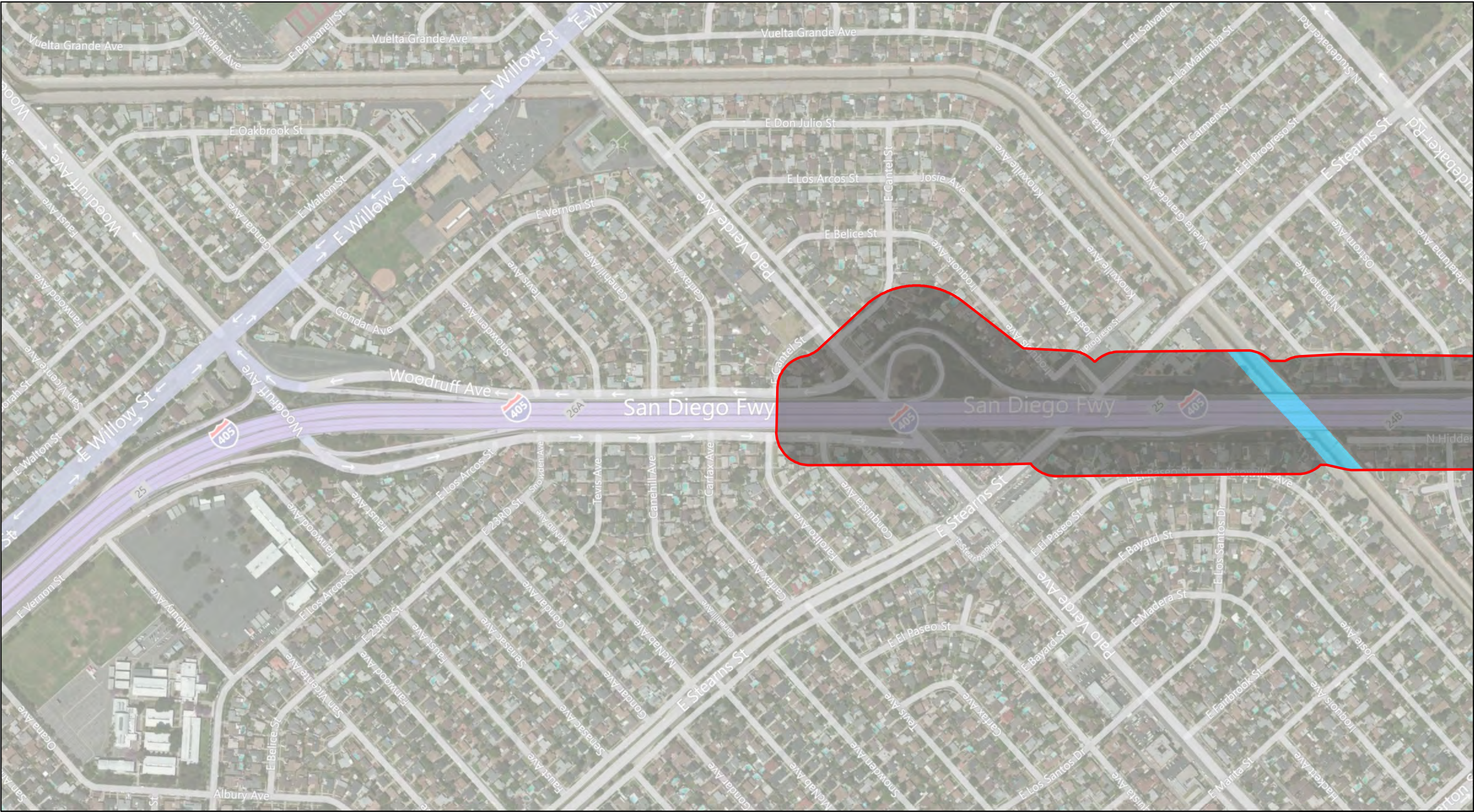
Vegetation Communities
Alternative 3
March 2012
 Figure 5-14



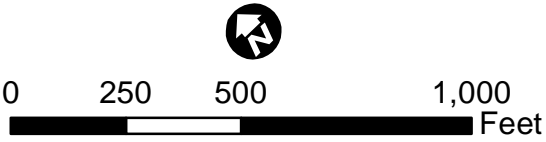


**Vegetation Communities
Alternative 3
March 2012**
Figure 5-15

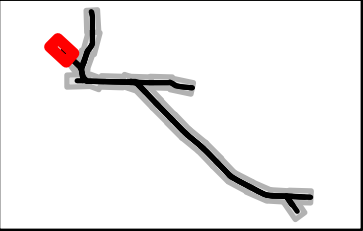


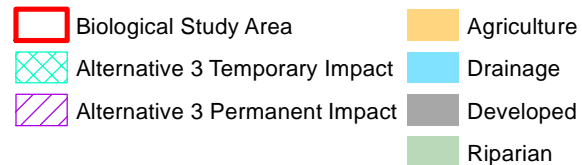


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|--------------------------------|-------------|
| Biological Study Area | Agriculture |
| Alternative 3 Temporary Impact | Drainage |
| Alternative 3 Permanent Impact | Developed |
| | Riparian |

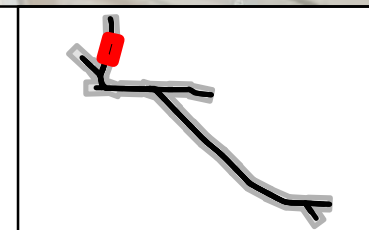


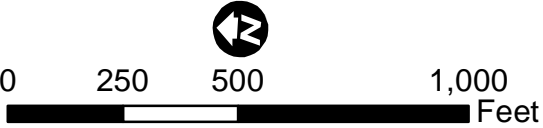
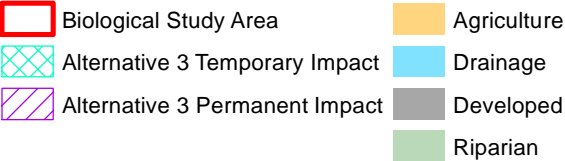
Vegetation Communities
Alternative 3
March 2012
Figure 5-16



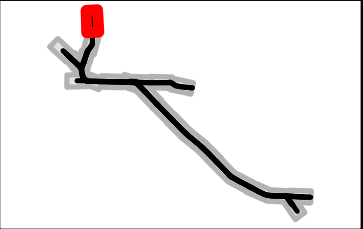


**Vegetation Communities
Alternative 3
March 2012**
Figure 5-17










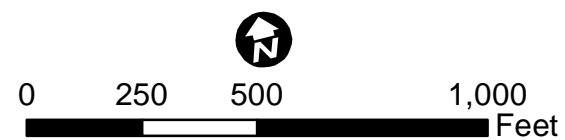


Vegetation Communities
Alternative 3
March 2012
Figure 5-18

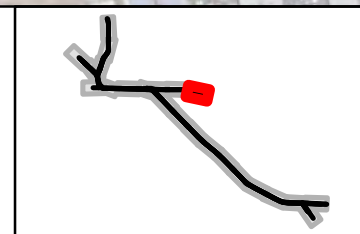


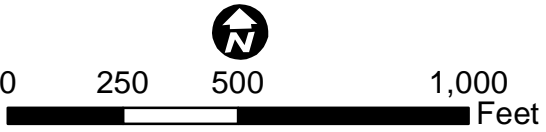
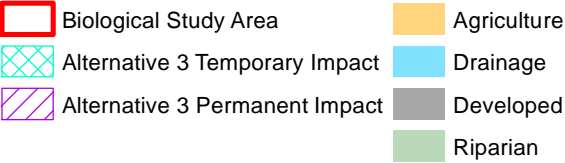


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|---|---|
|  Biological Study Area |  Agriculture |
|  Alternative 3 Temporary Impact |  Drainage |
|  Alternative 3 Permanent Impact |  Developed |
| |  Riparian |

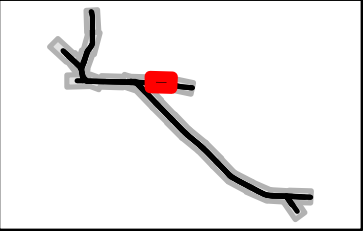


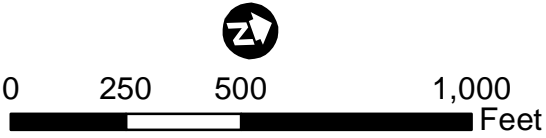
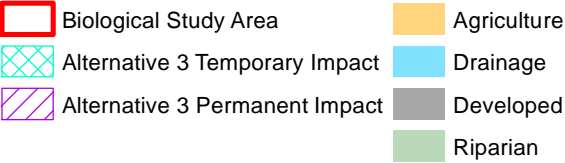
Vegetation Communities
Alternative 3
March 2012
 Figure 5-19



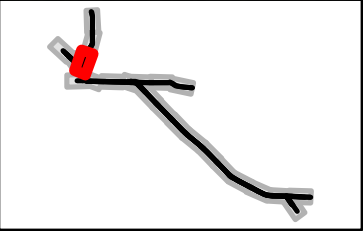


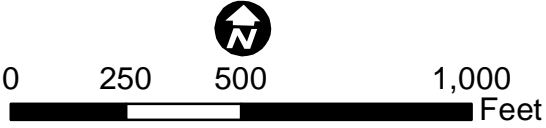
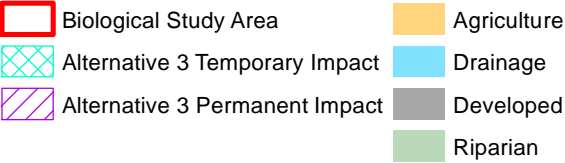
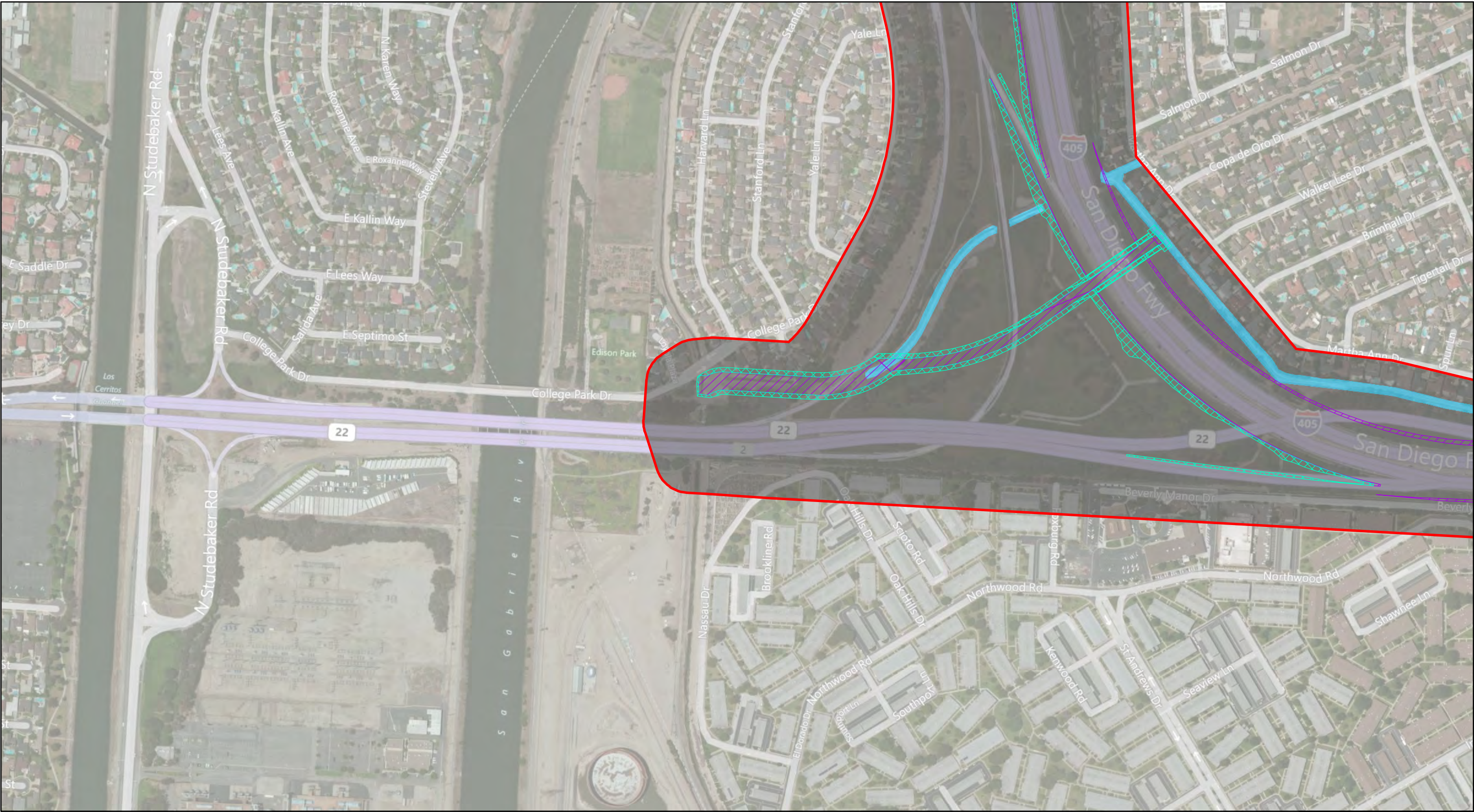
Vegetation Communities
Alternative 3
March 2012
Figure 5-20



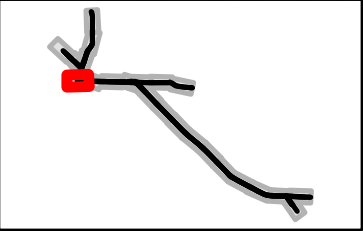


Vegetation Communities
Alternative 3
March 2012
Figure 5-22

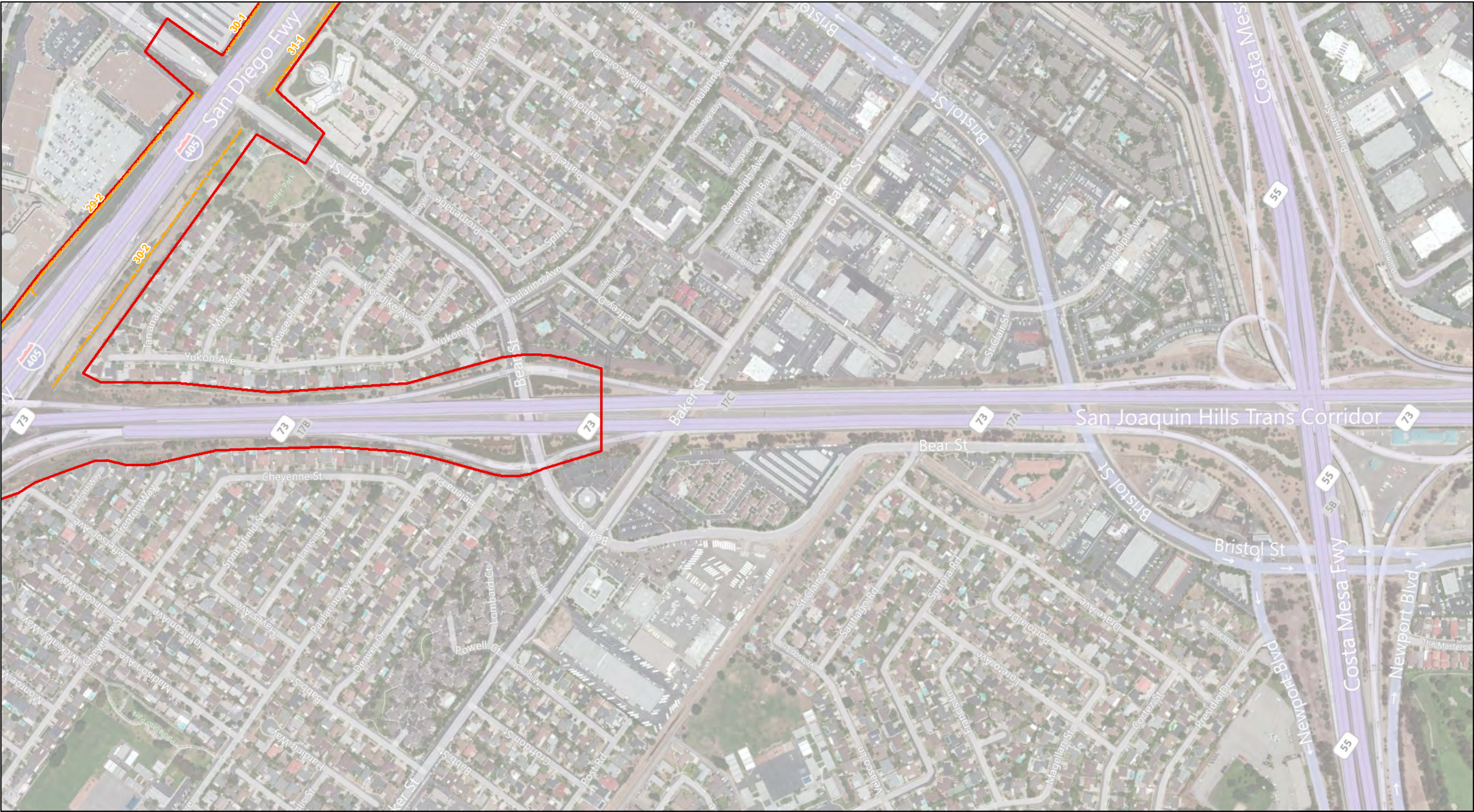




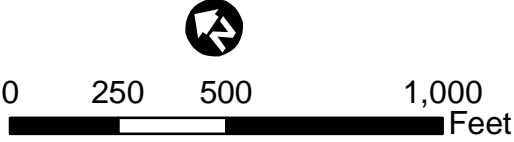
Vegetation Communities
Alternative 3
March 2012
Figure 5-23



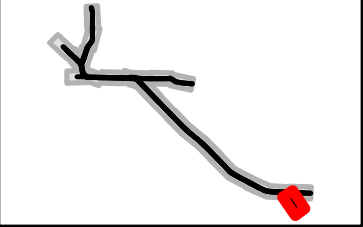
05: Alternative 1 Impacts to USACE, RWQCB, and CDFG Jurisdictional Drainages

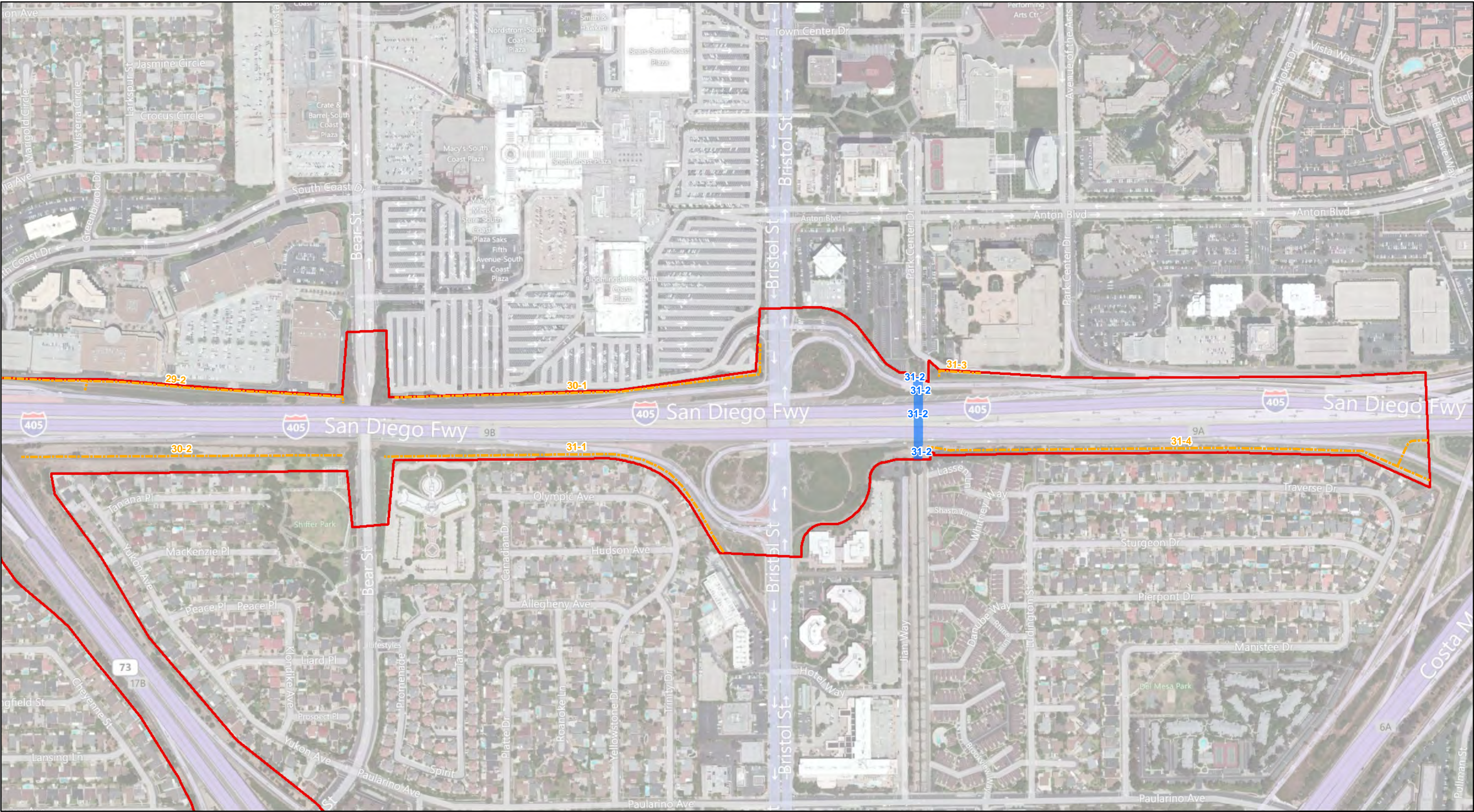


- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-1

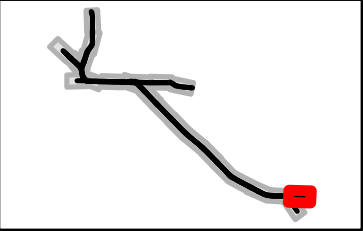




- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
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Figure 1-2

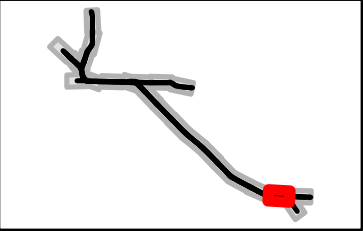


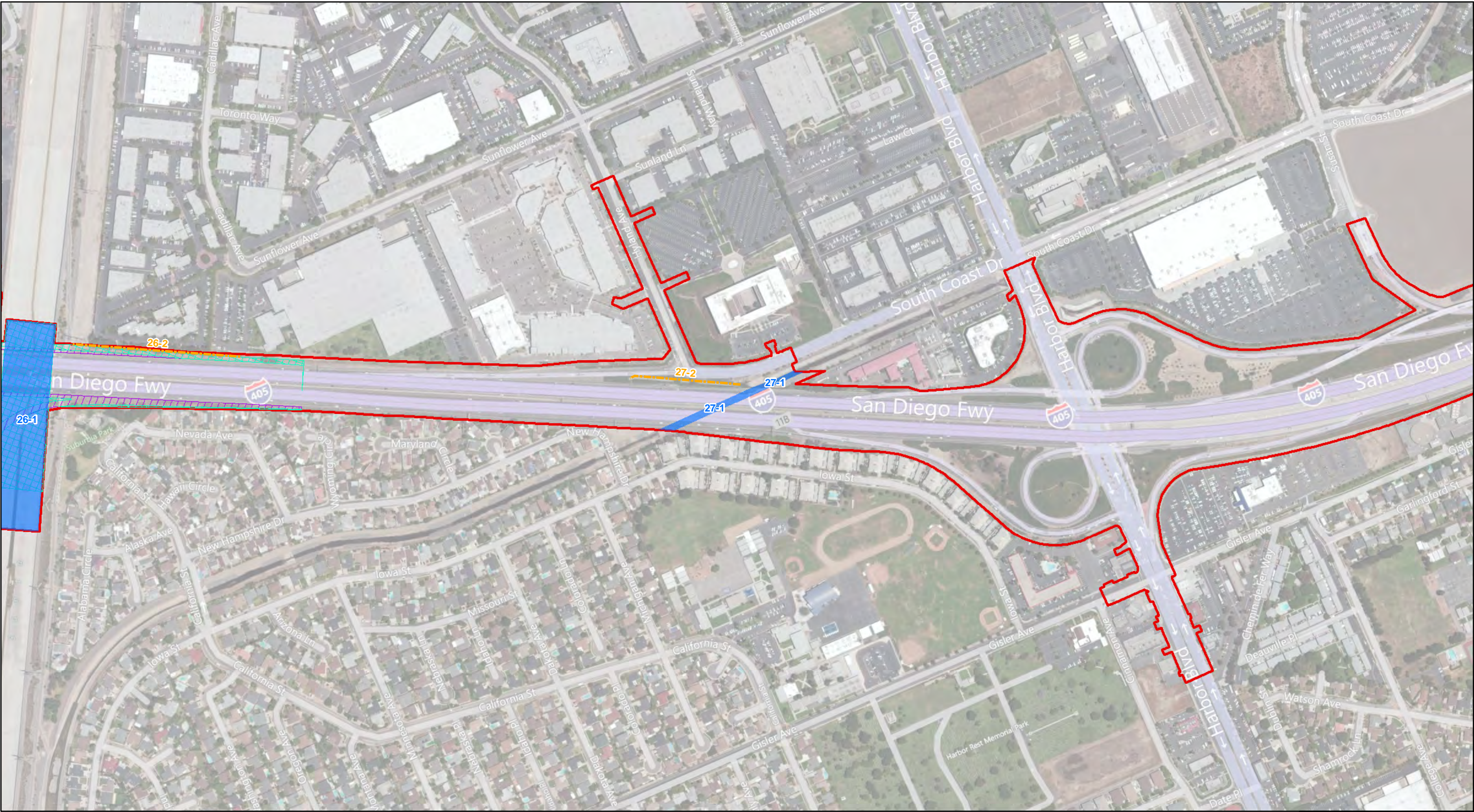


- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

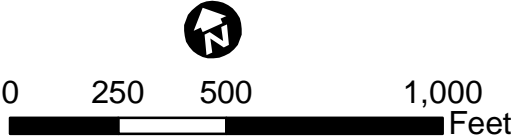


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-3

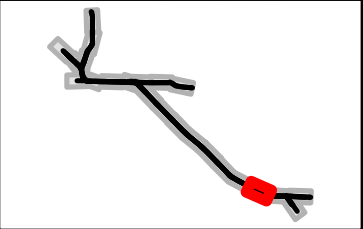


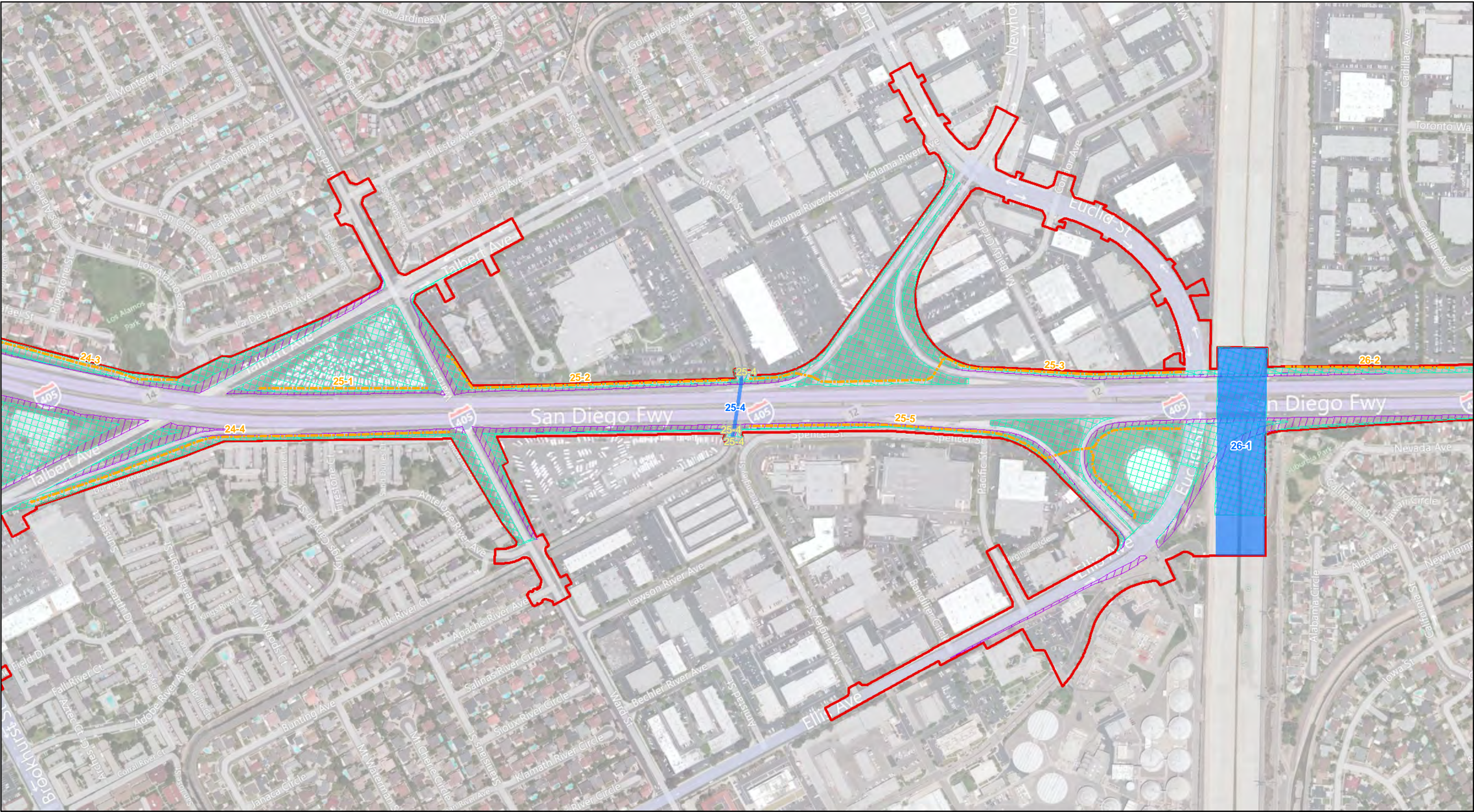


- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

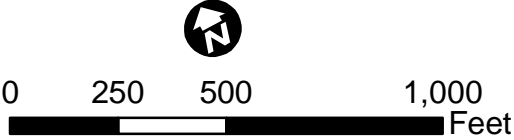


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-4

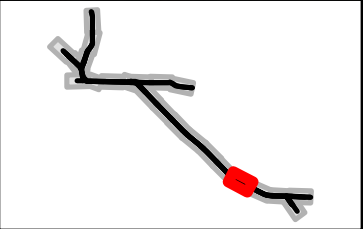


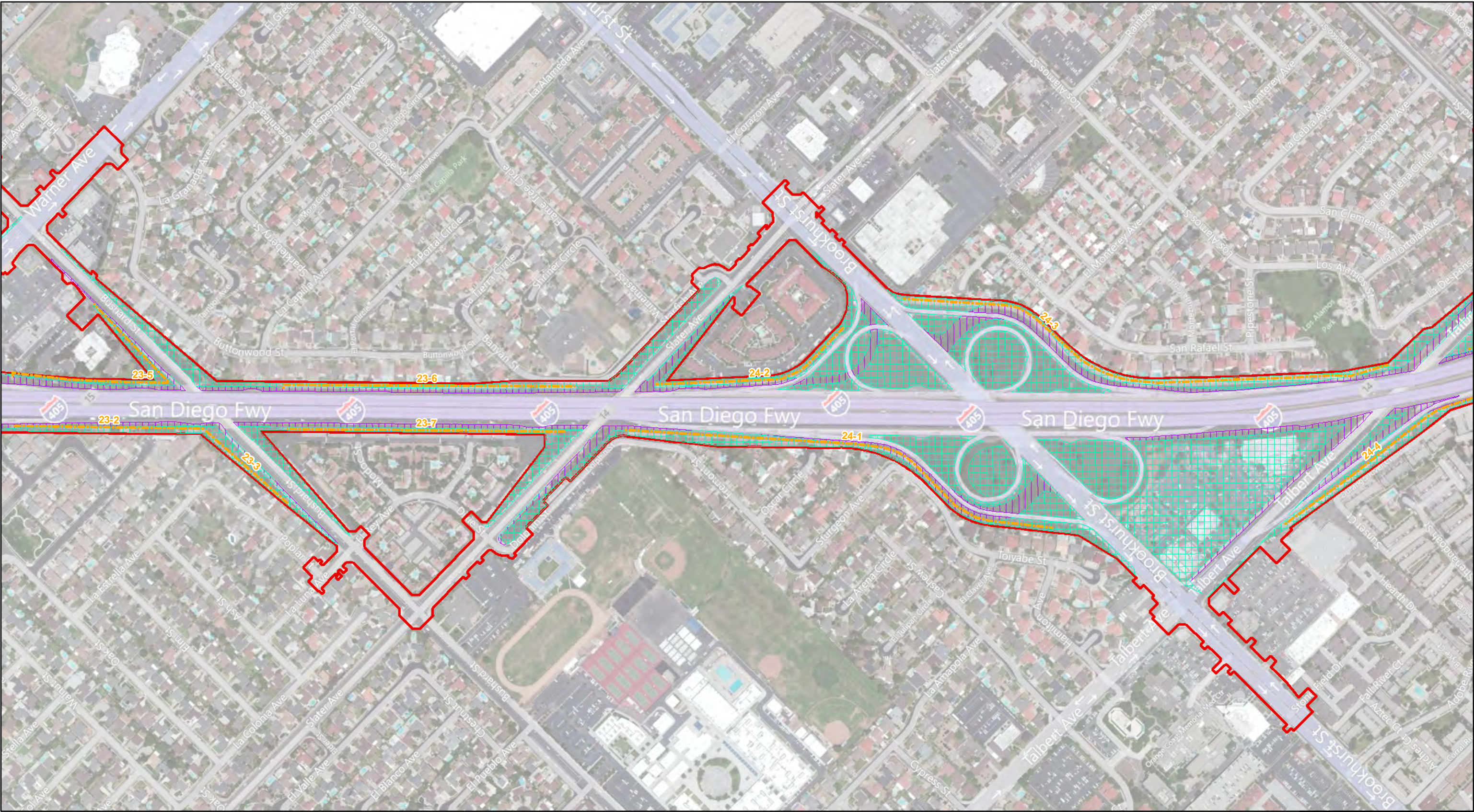


- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

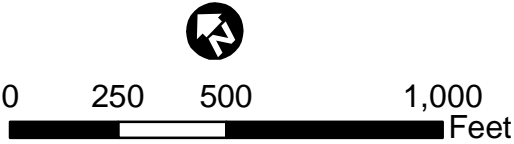


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-5

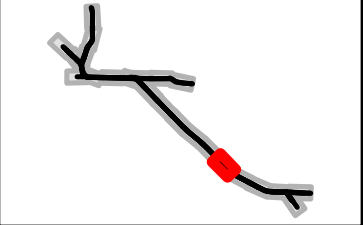


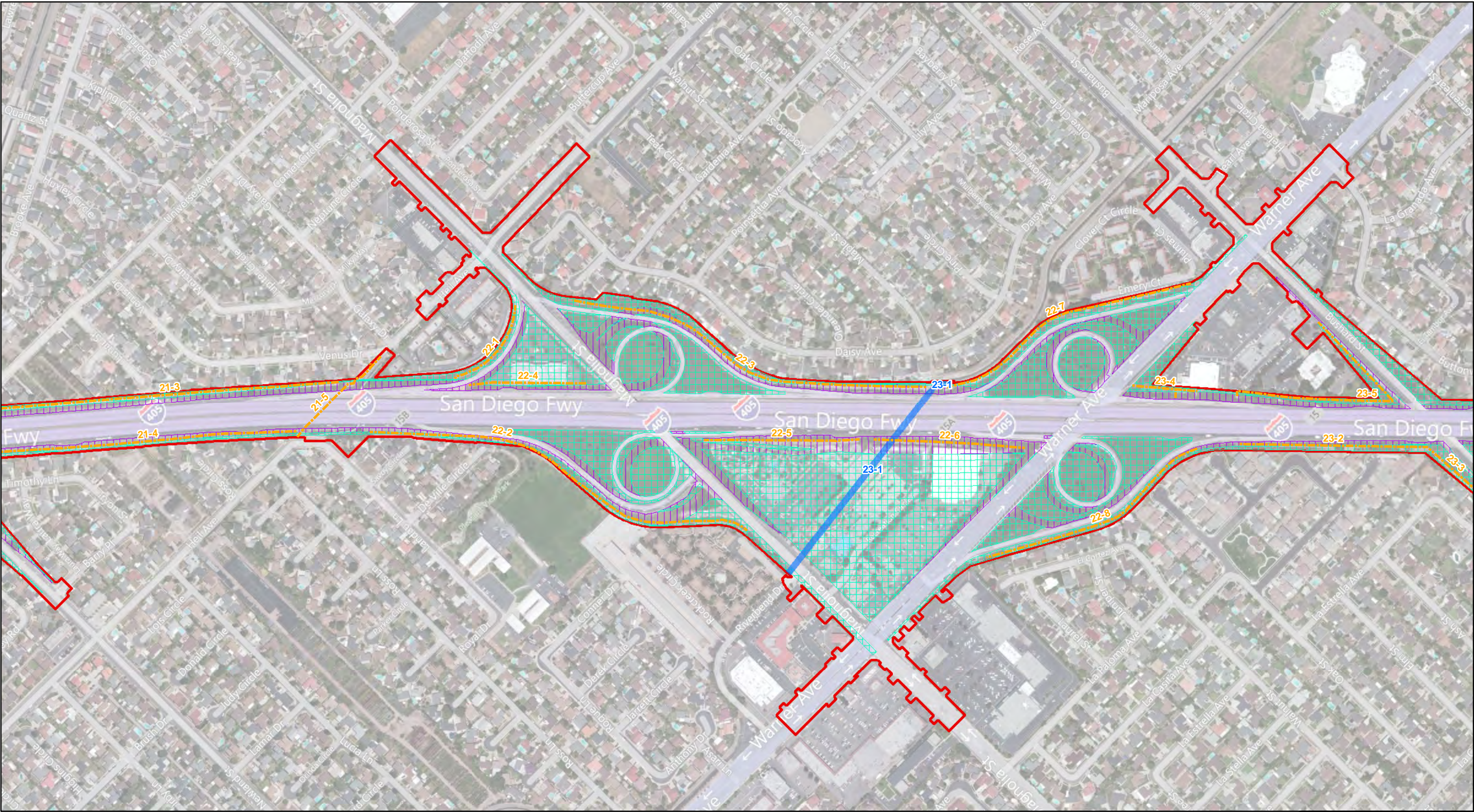


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

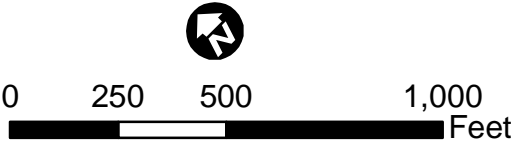


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-6

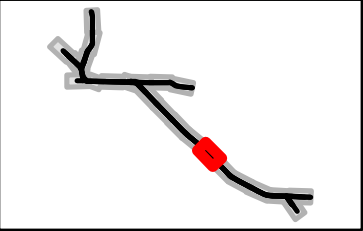


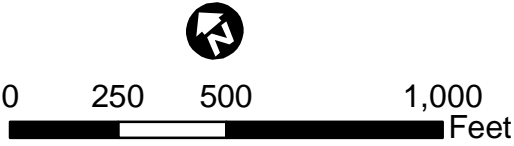
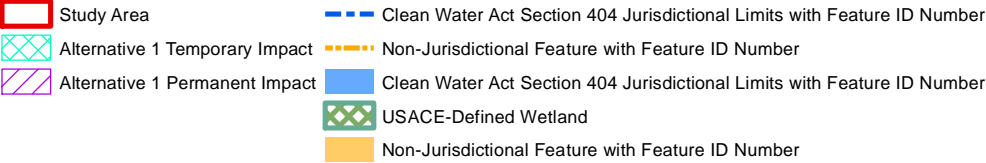
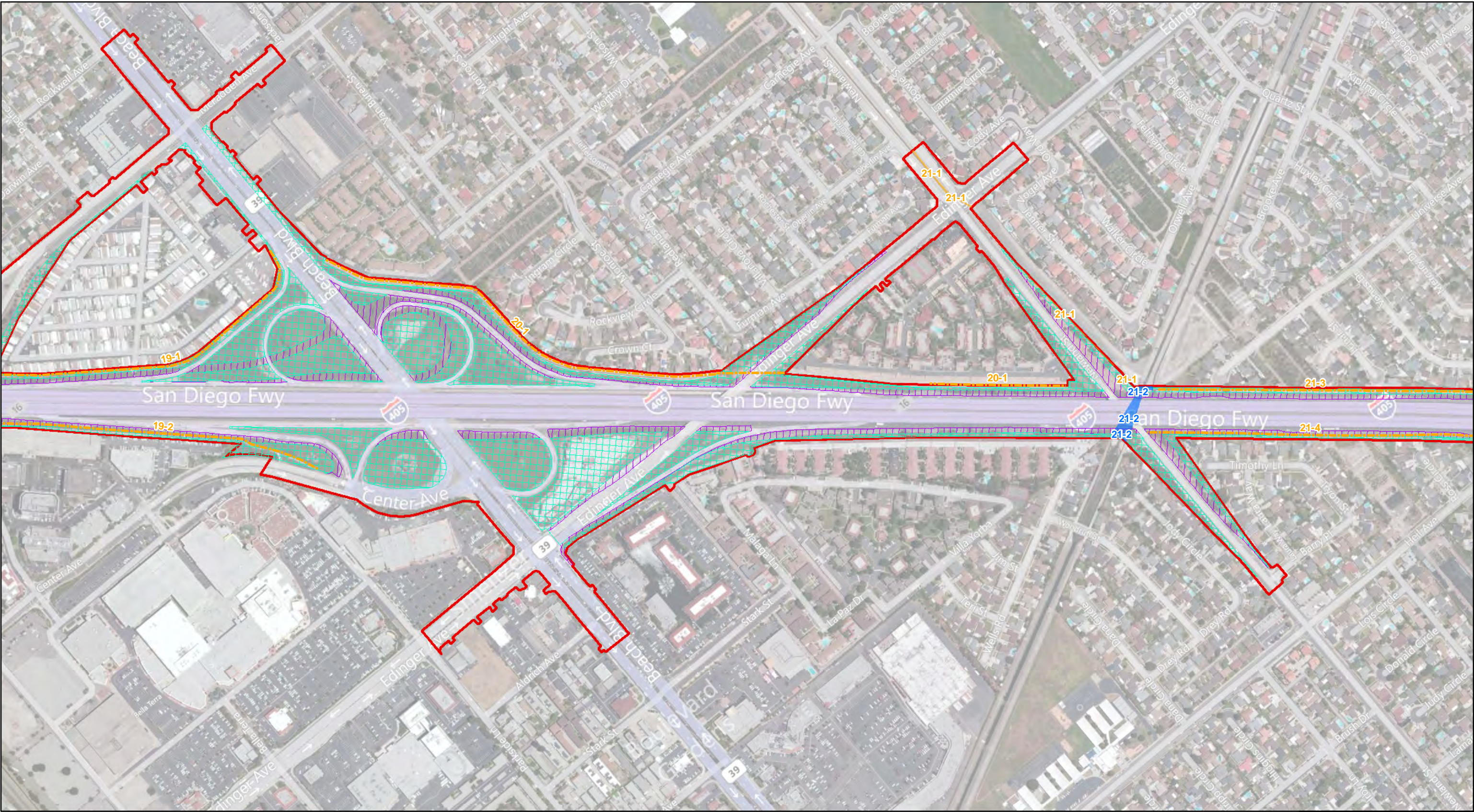


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 1 Temporary Impact
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

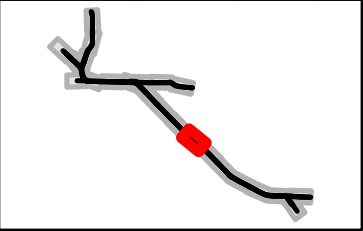


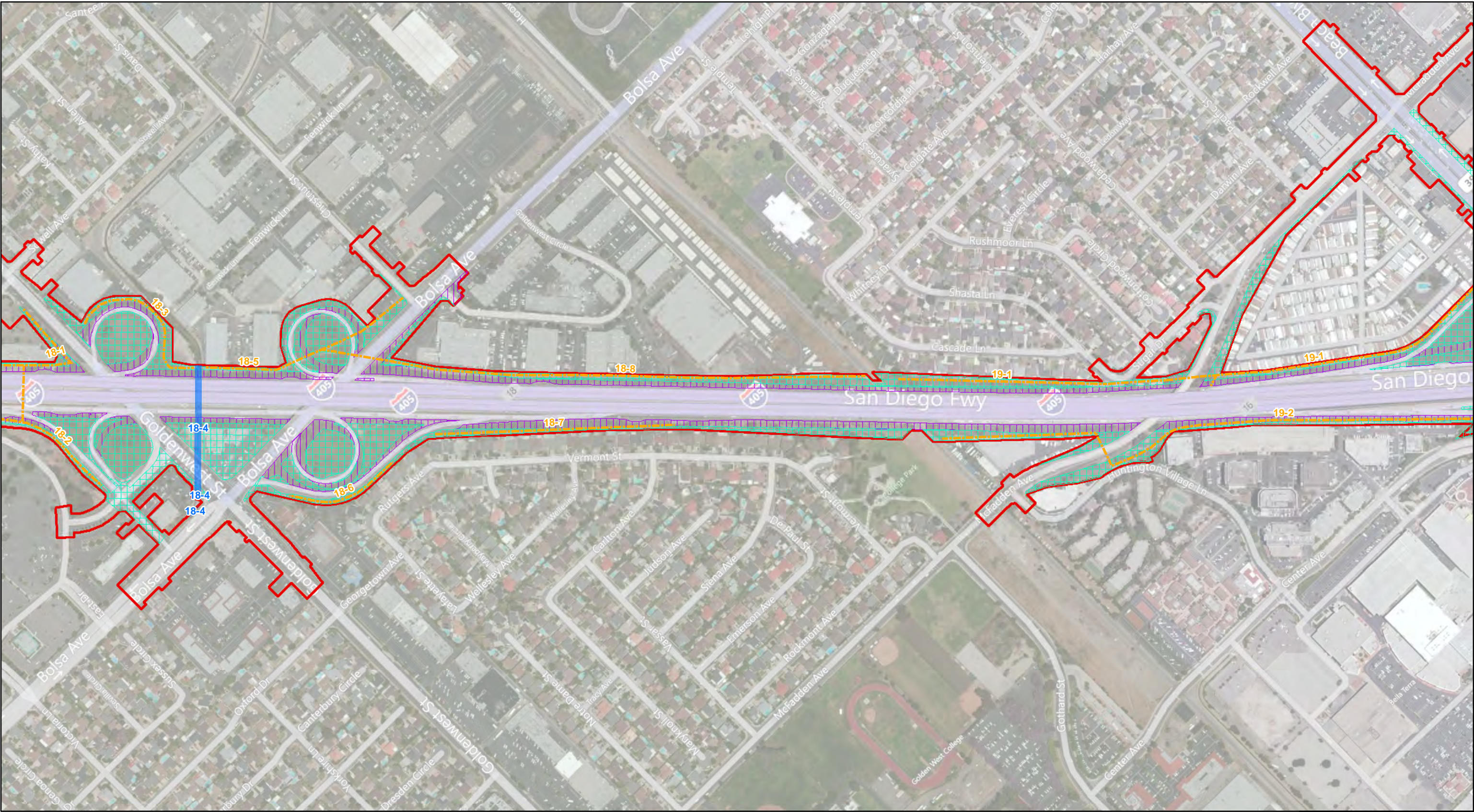
USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-7



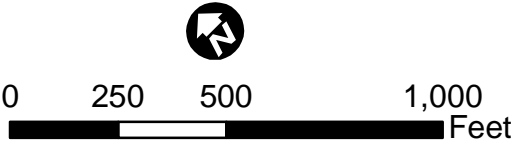


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-8

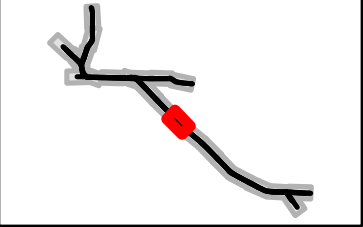


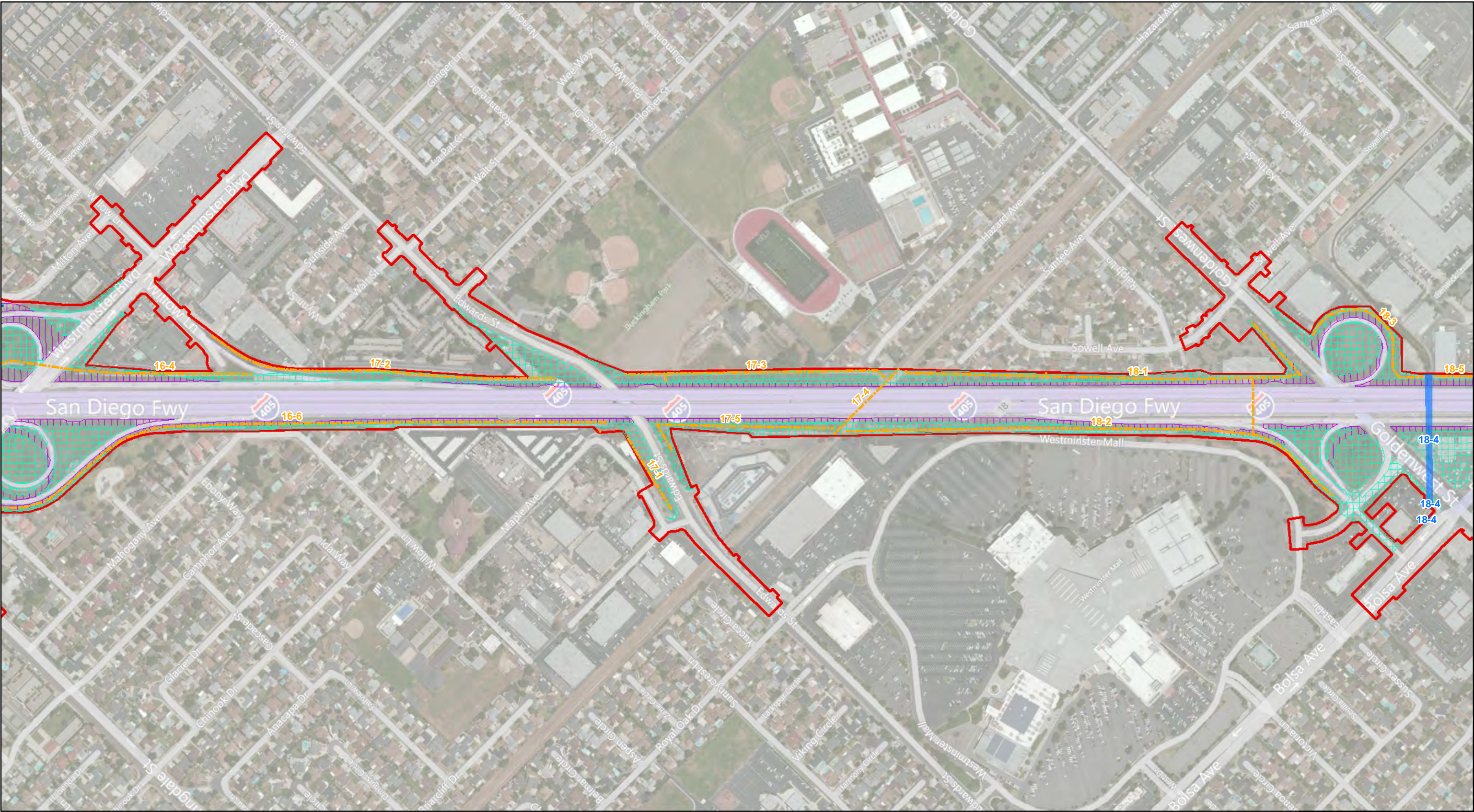


- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

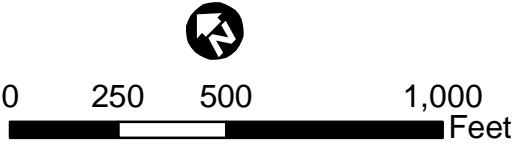


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-9

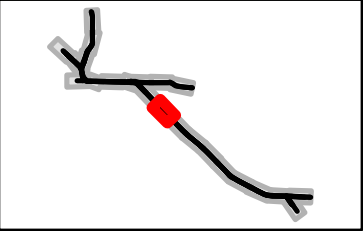


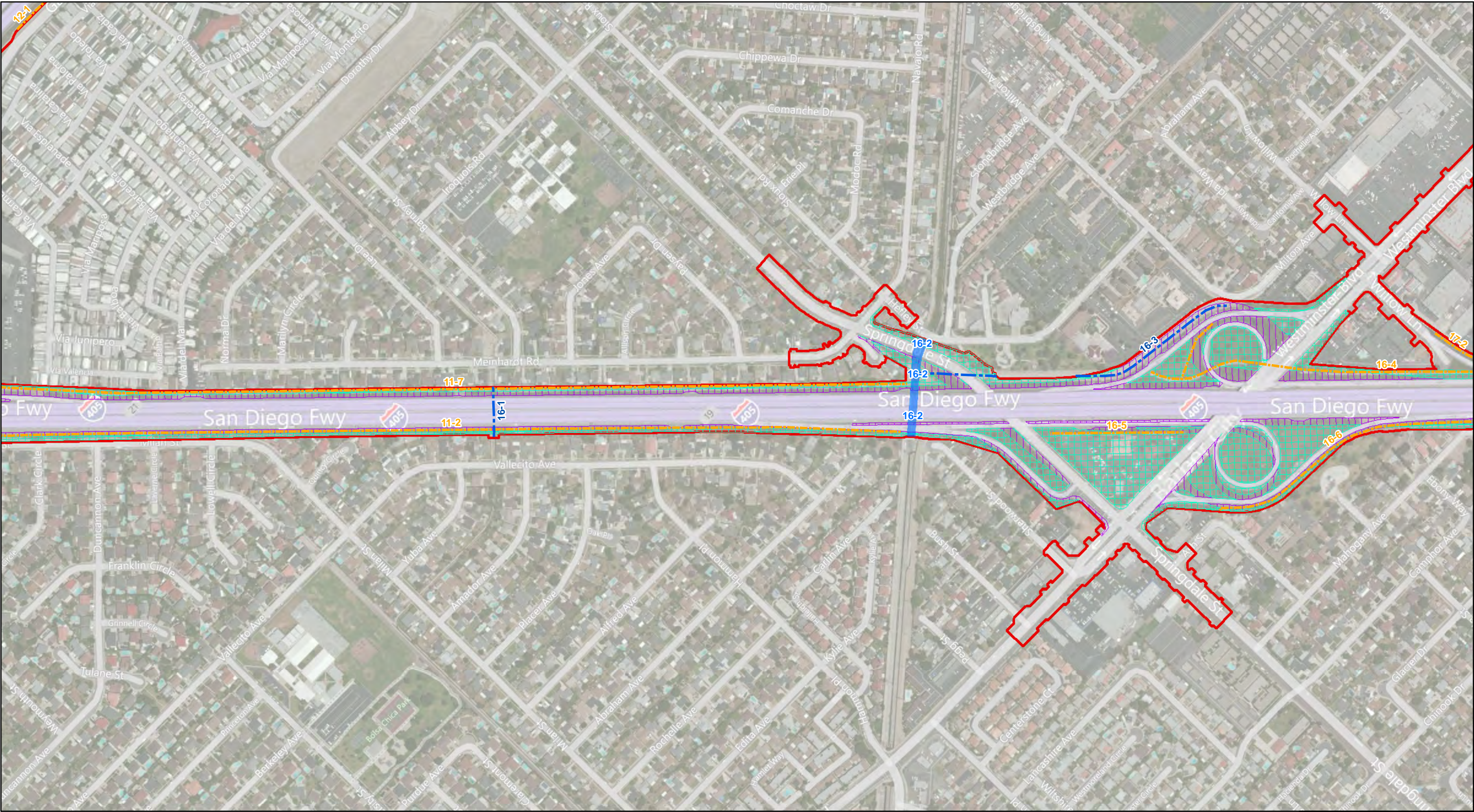


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

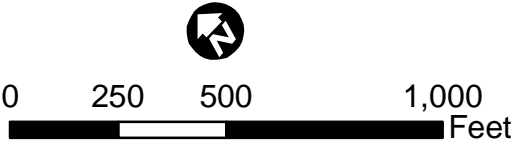


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-10

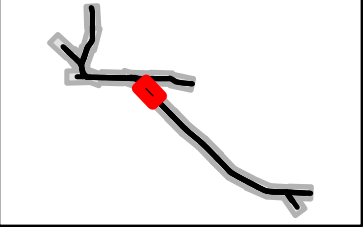


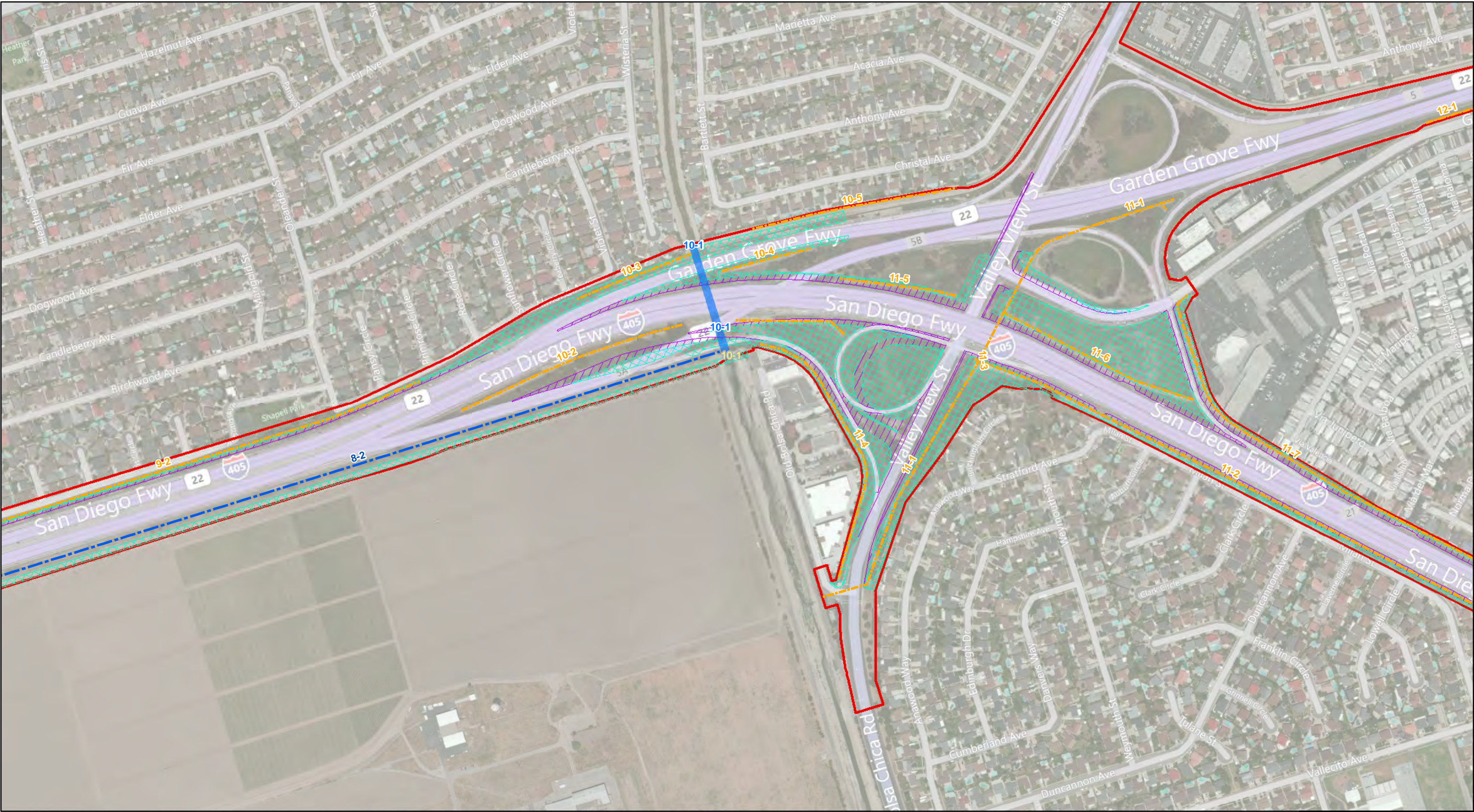


- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

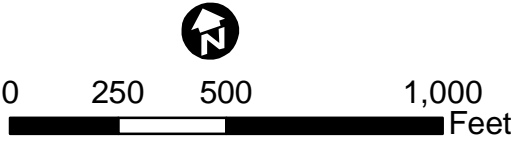


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-11

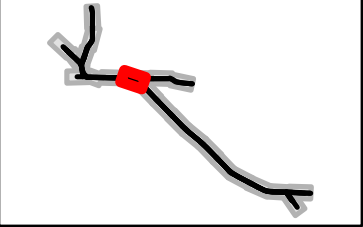




- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-12

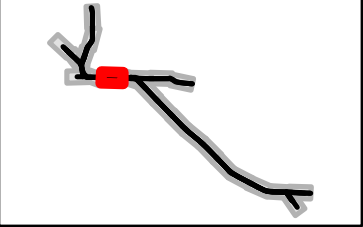


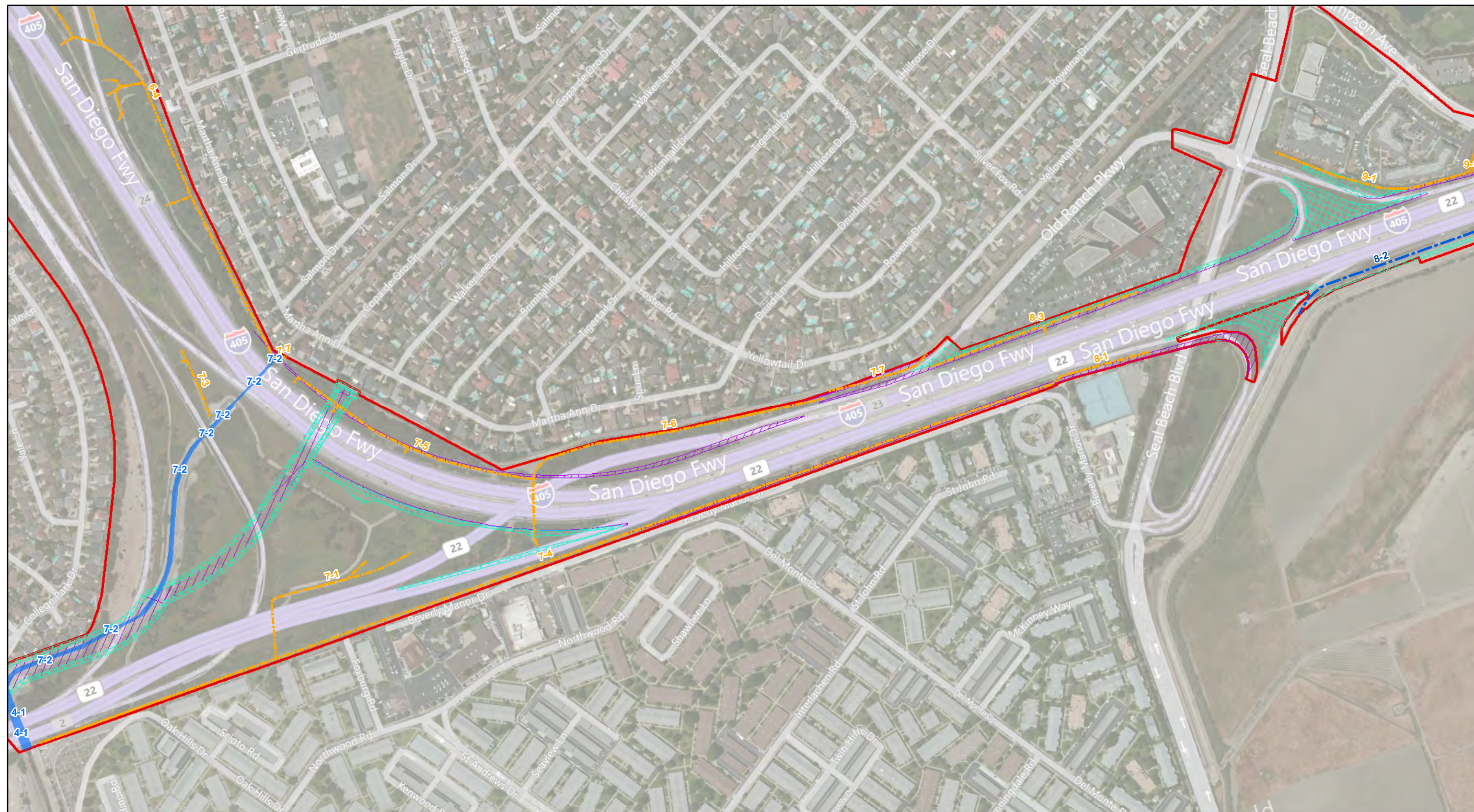


- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
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Figure 1-13

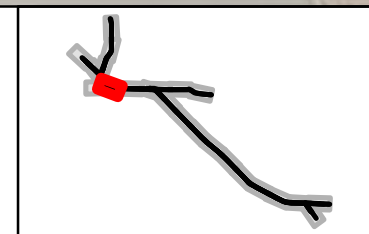


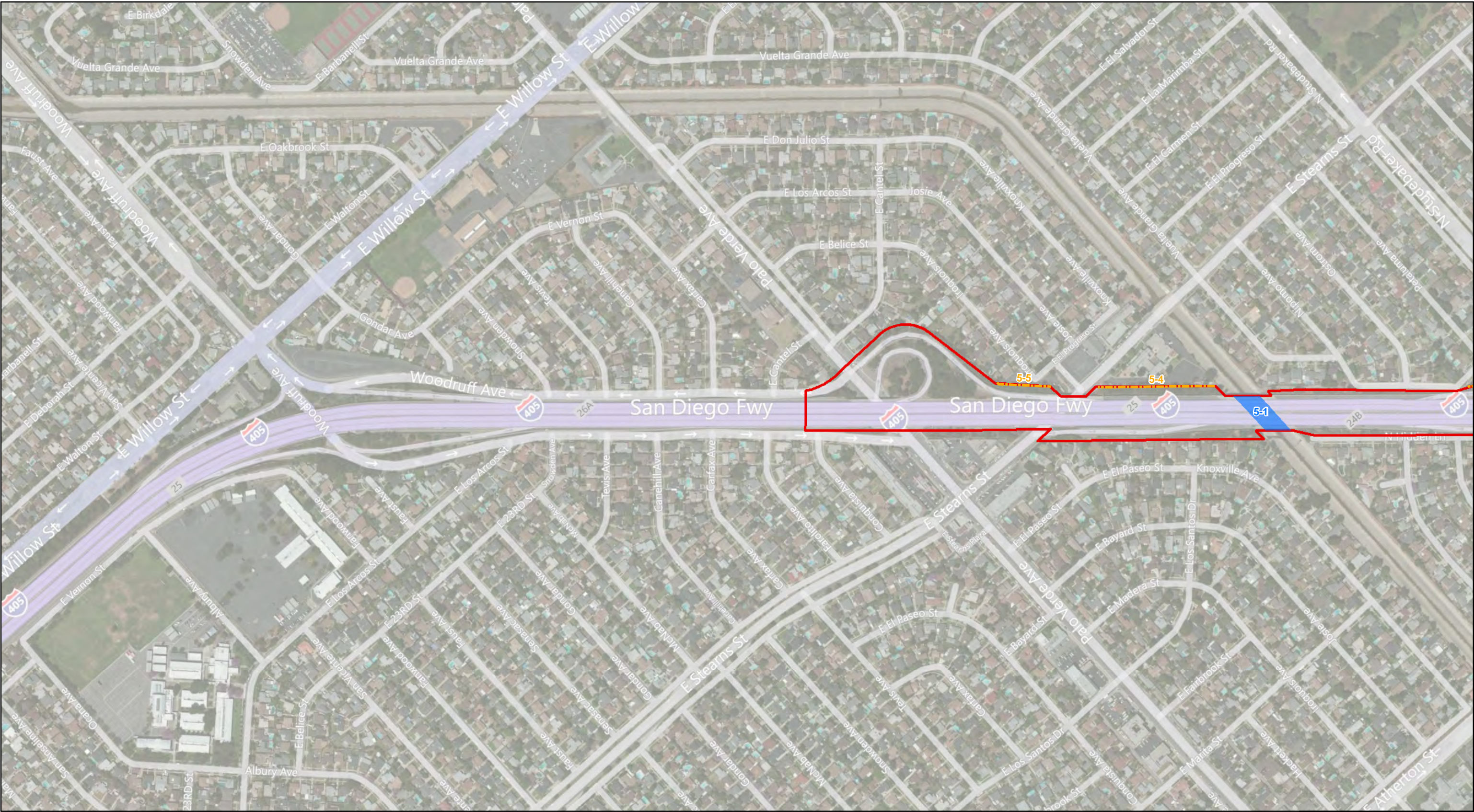


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 1 Permanent Impact
- USACE-Defined Wetland

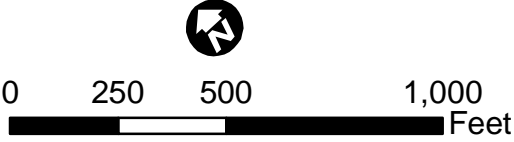


USACE, RWQCB, CDFG
 Drainage Exhibit
 Alternative 1
 March 2012
 Figure 1-14

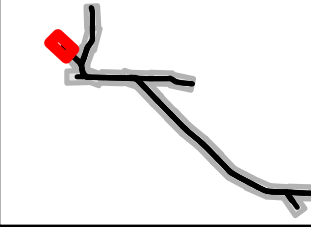




- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

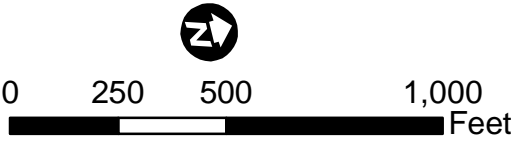


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-16

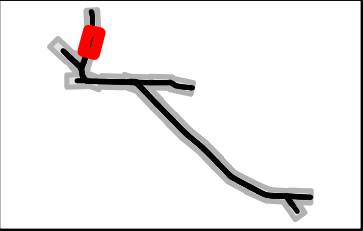




- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact

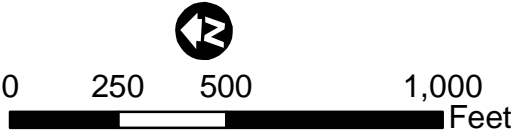


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-17

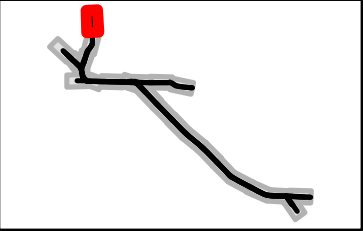




- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 1 Temporary Impact
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

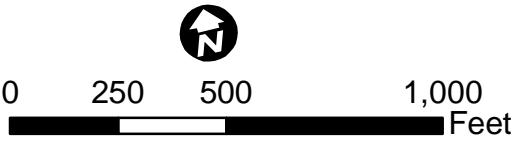


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-18

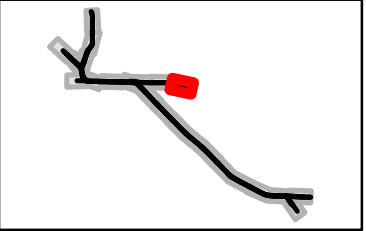


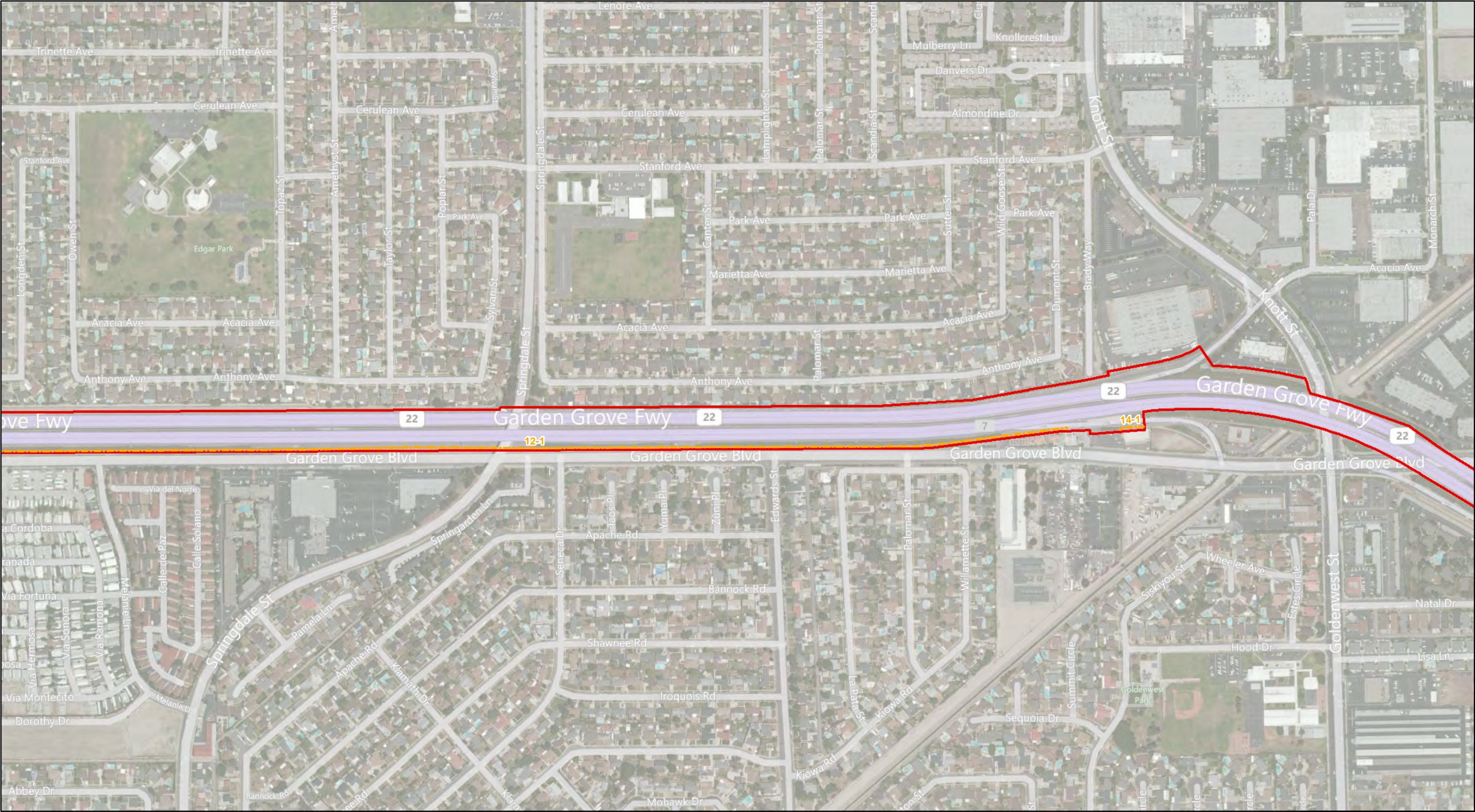


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- USACE-Defined Wetland
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-19

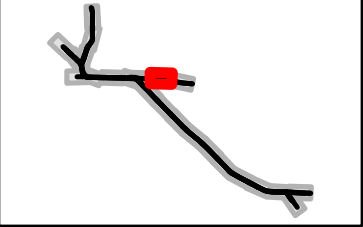


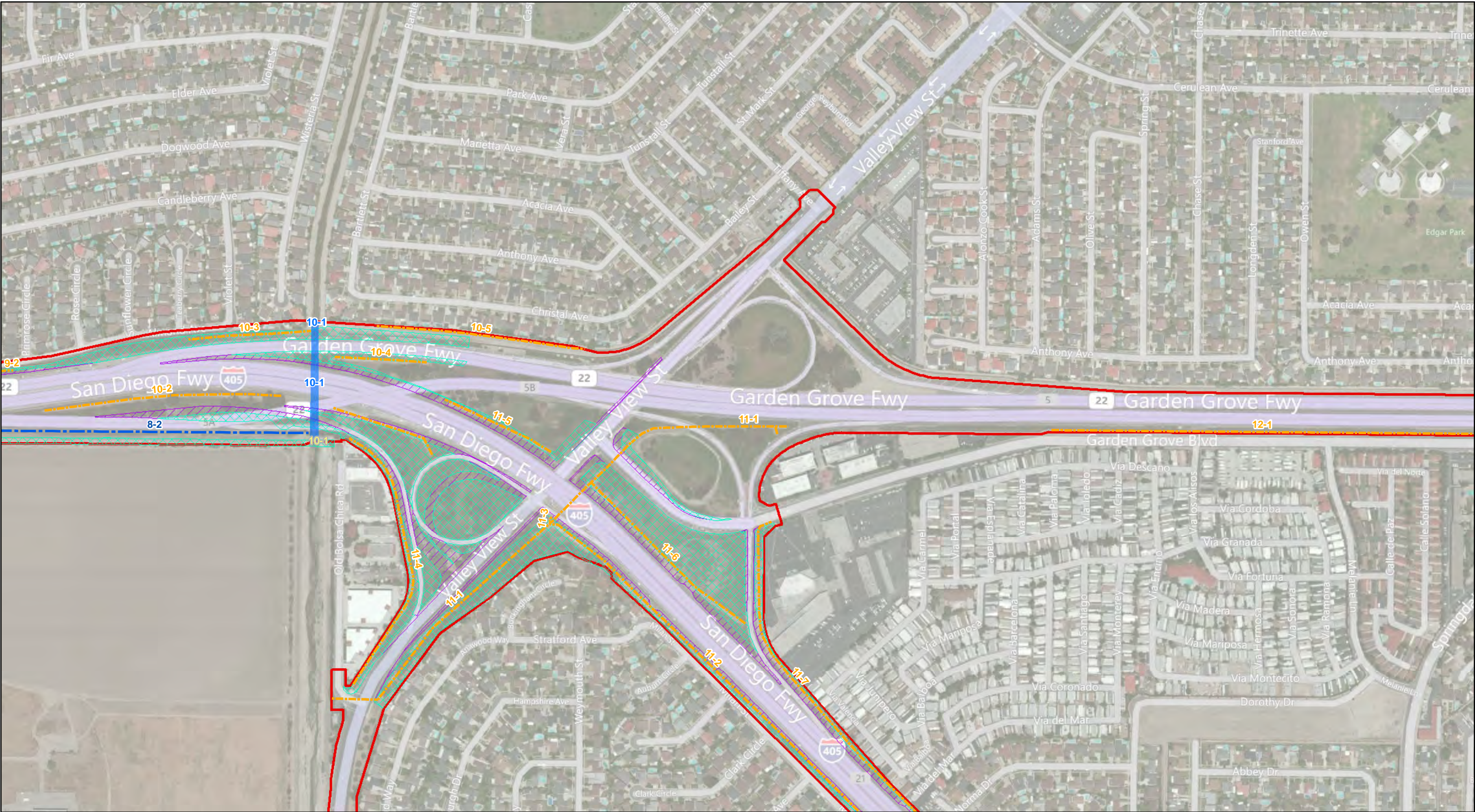


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 1 Temporary Impact
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-20

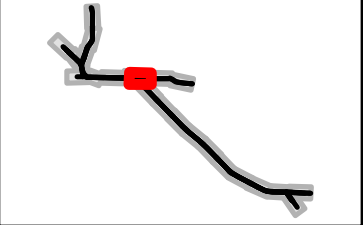


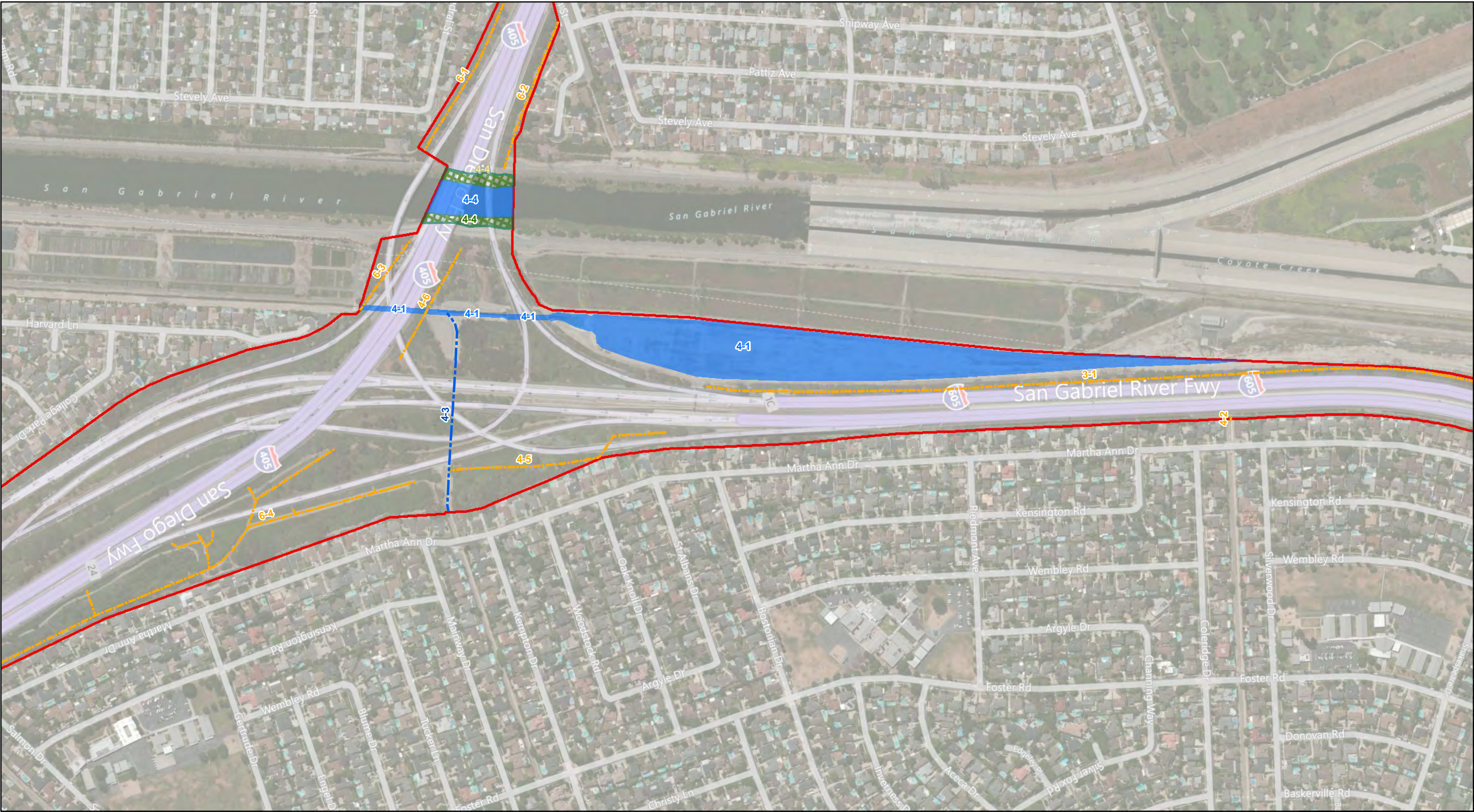


- Study Area
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

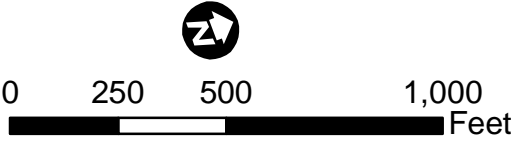


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-21

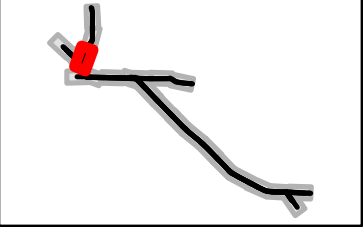


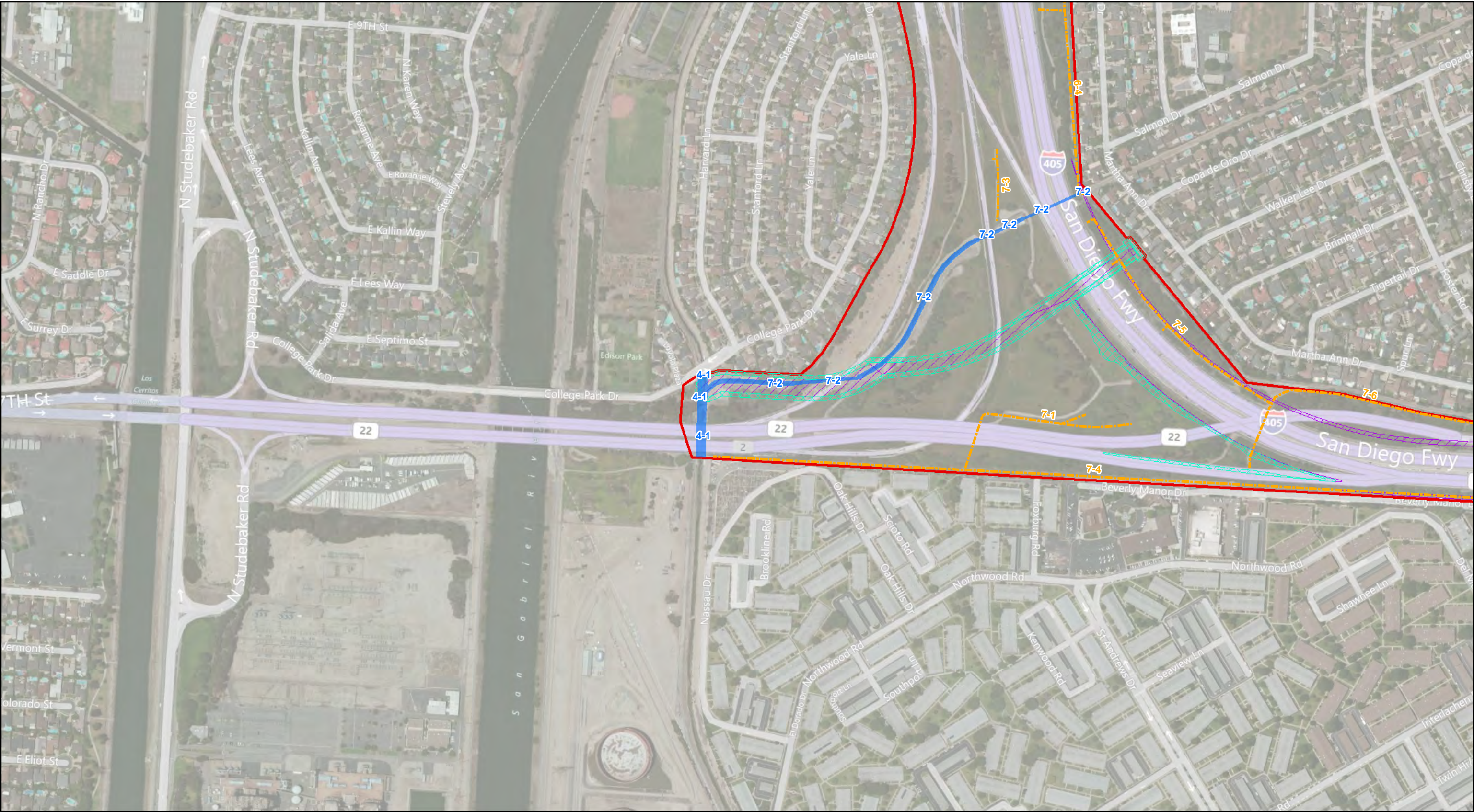


- | | |
|--------------------------------|--|
| Study Area | Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number |
| Alternative 1 Temporary Impact | Non-Jurisdictional Feature with Feature ID Number |
| Alternative 1 Permanent Impact | Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number |
| | USACE-Defined Wetland |
| | Non-Jurisdictional Feature with Feature ID Number |



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-22

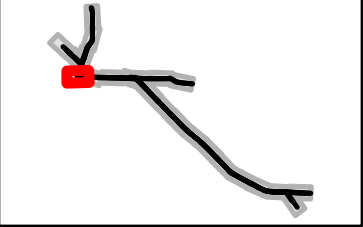




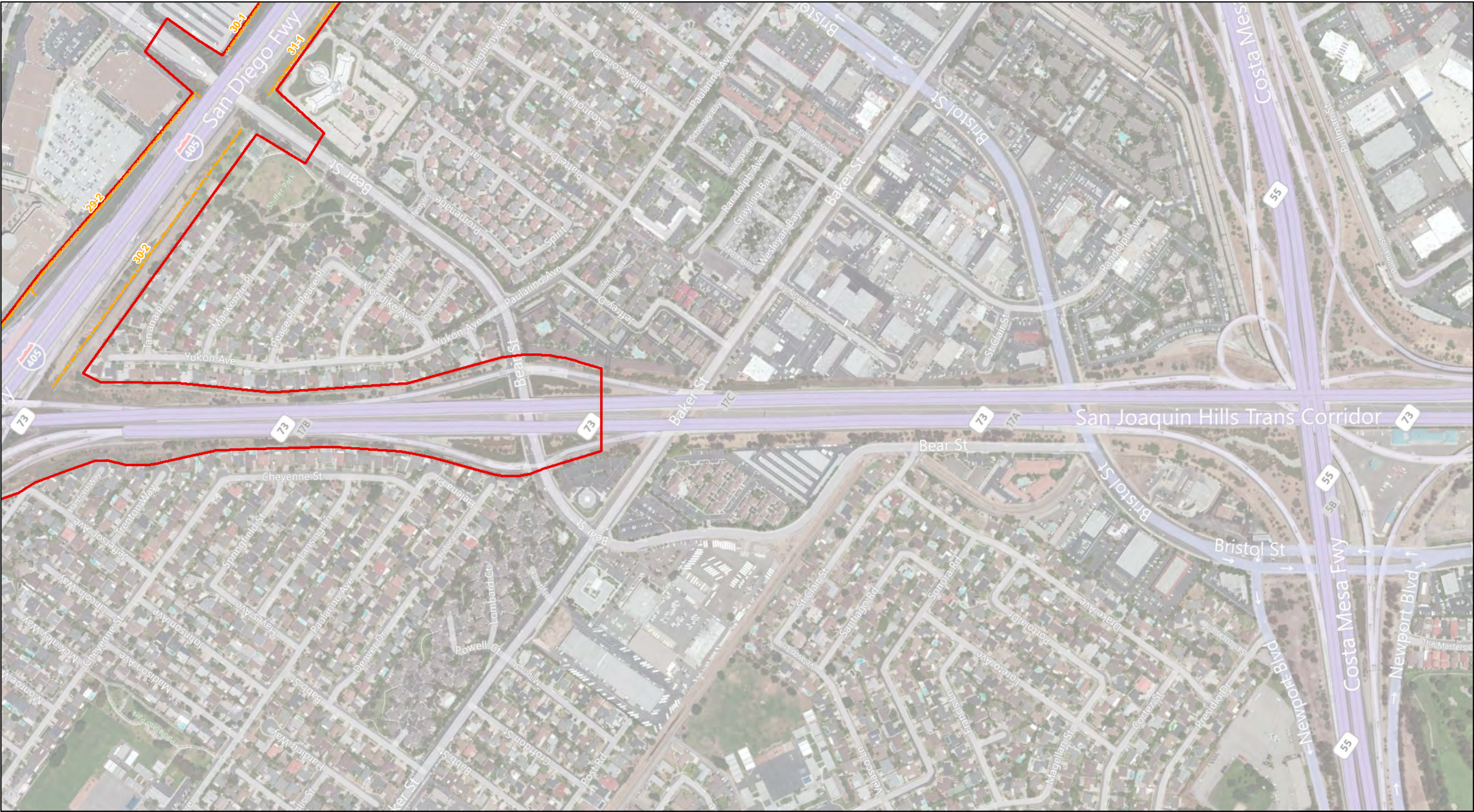
- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 1 Temporary Impact
- Alternative 1 Permanent Impact
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



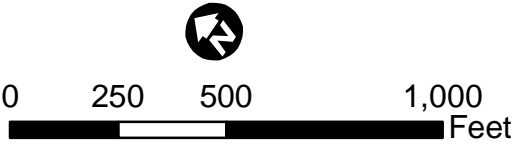
USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 1
March 2012
Figure 1-23



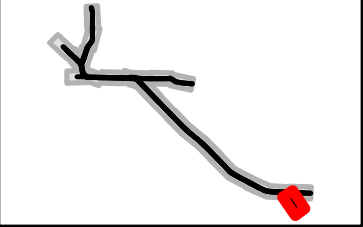
06: Alternative 2 Impacts to USACE, RWQCB, and CDFG Jurisdictional Drainages

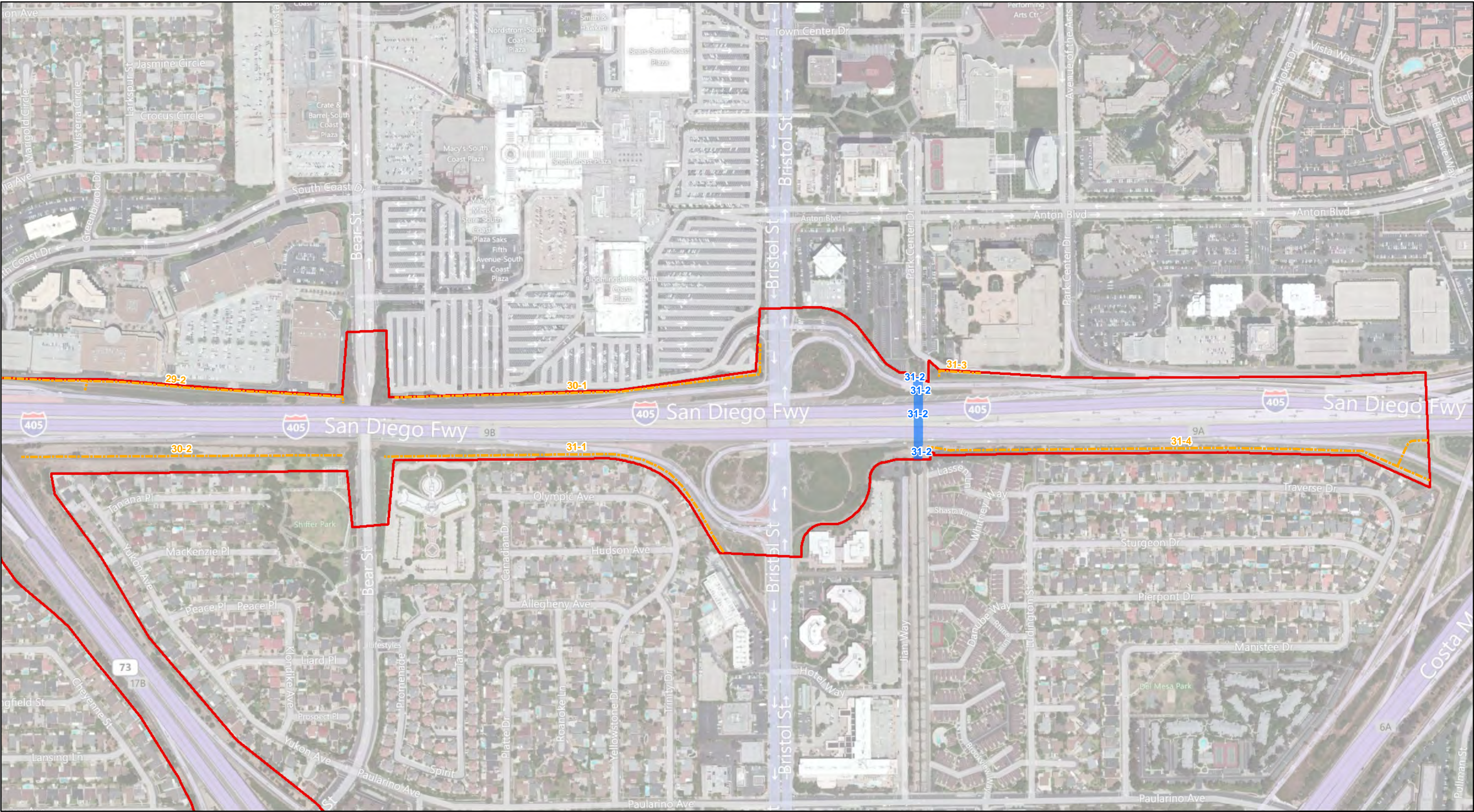


- Study Area
- Alternative 2 Temporary Impact
- Alternative 2 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-1

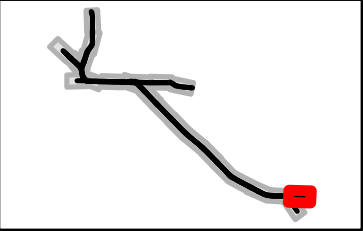




- Study Area
- Alternative 2 Temporary Impact
- Alternative 2 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-2

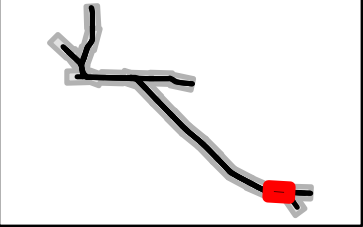


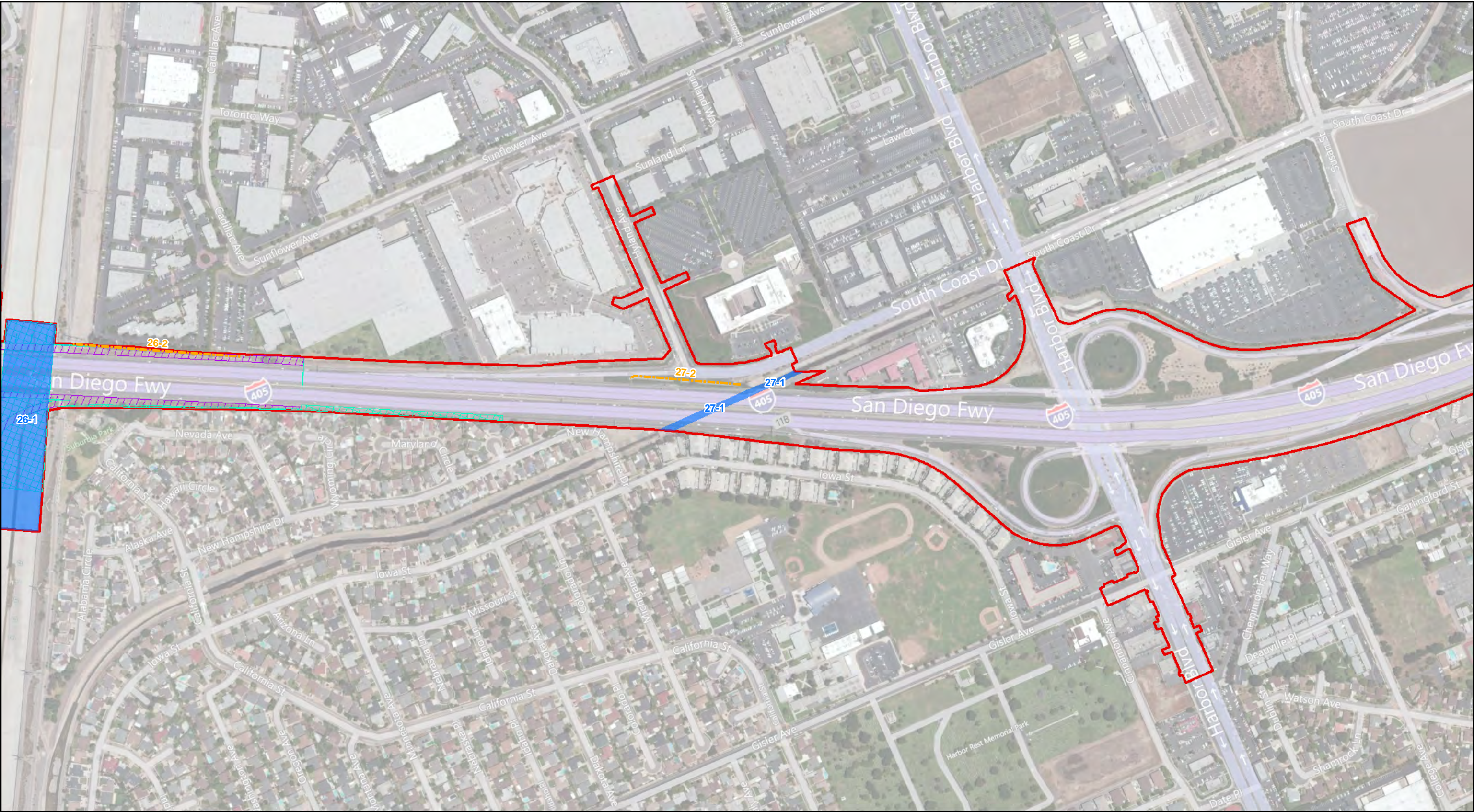


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 2 Temporary Impact
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 2 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

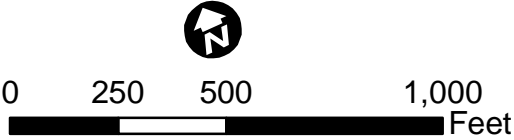


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-3

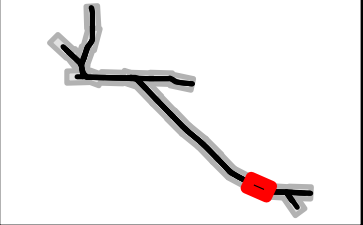


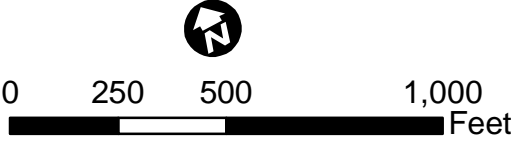
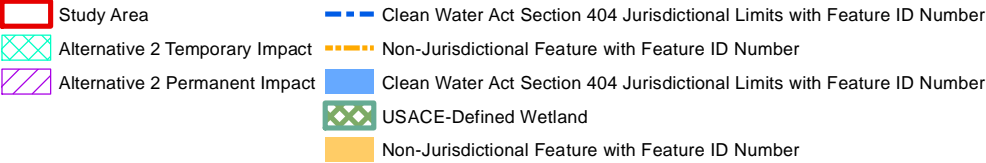
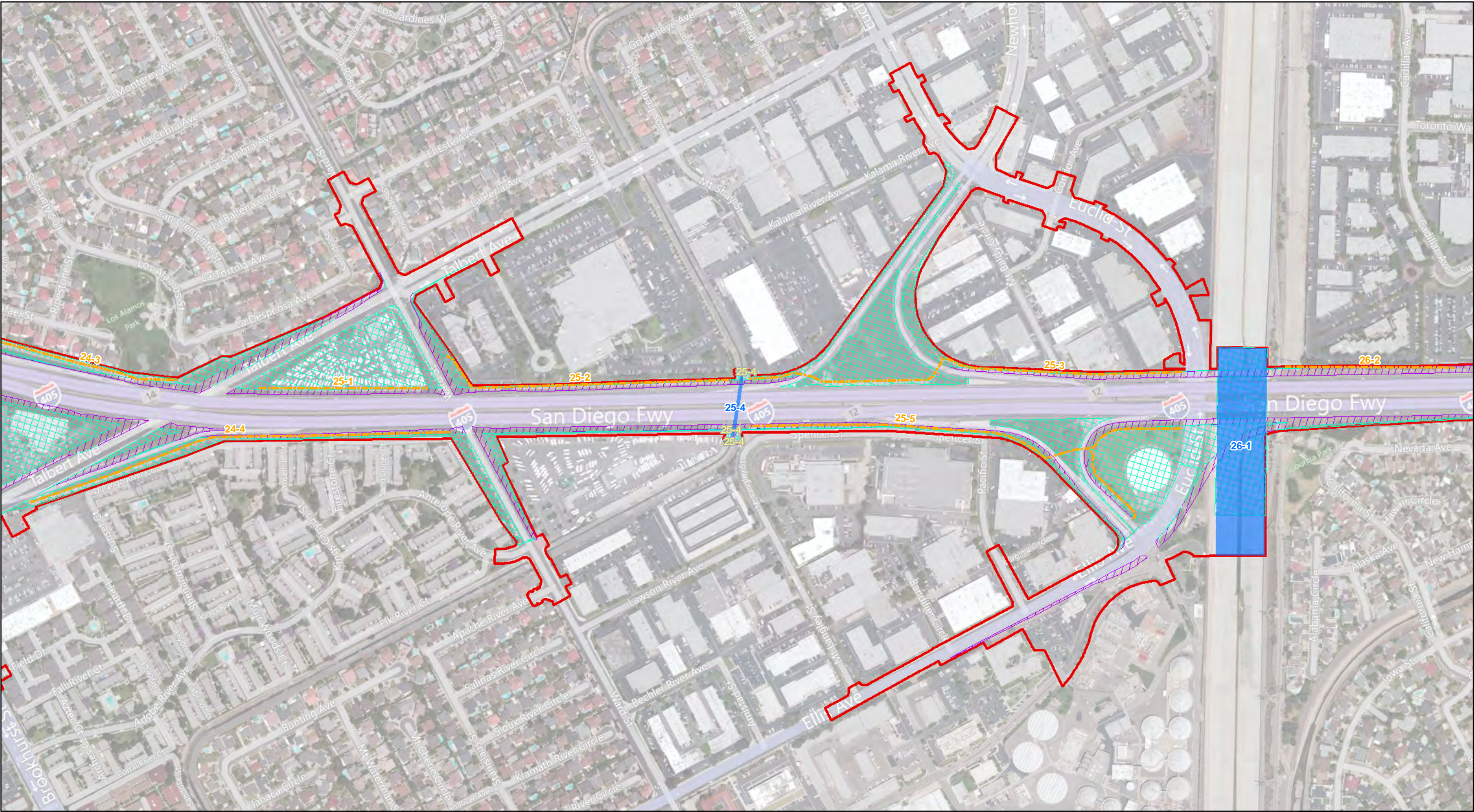


- Study Area
- Alternative 2 Temporary Impact
- Alternative 2 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

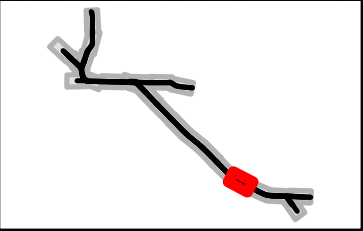


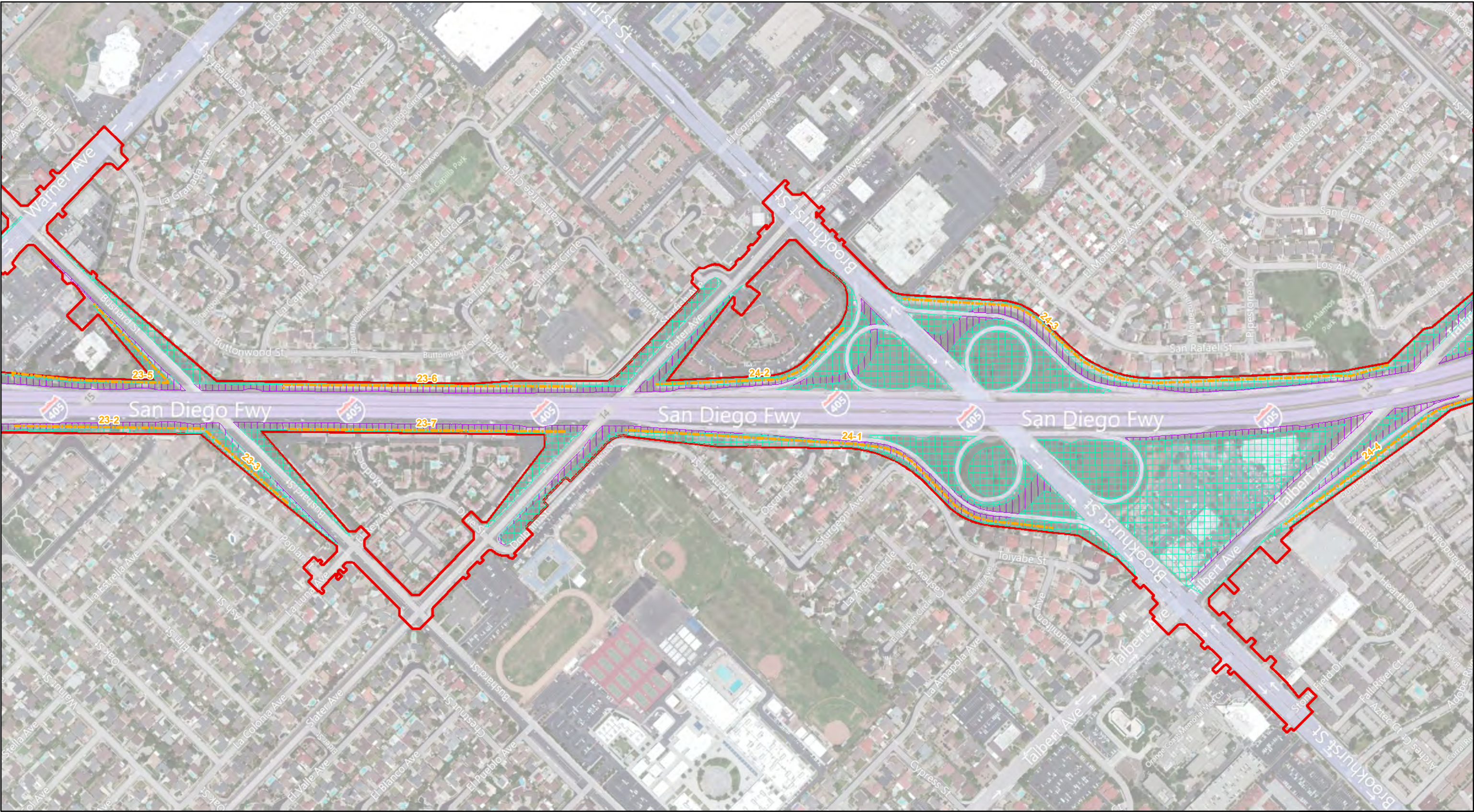
USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-4



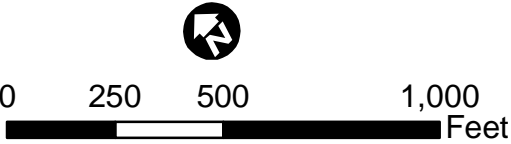


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-5

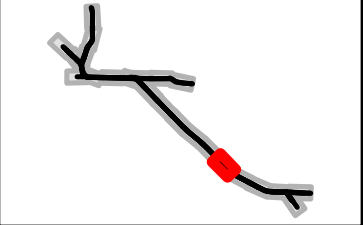


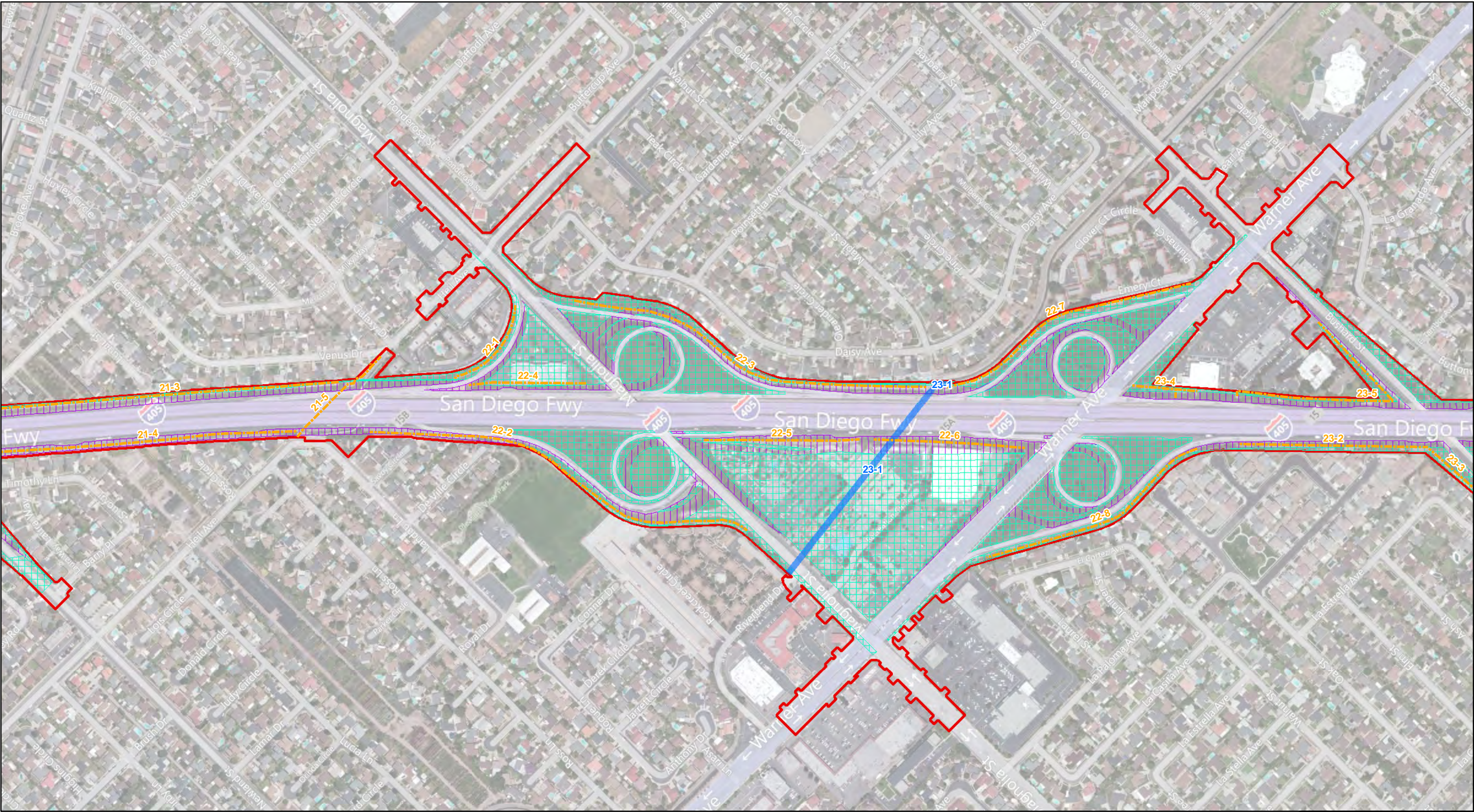


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 2 Temporary Impact
- Alternative 2 Permanent Impact
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

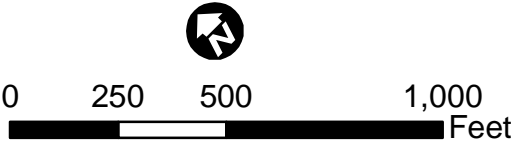


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-6

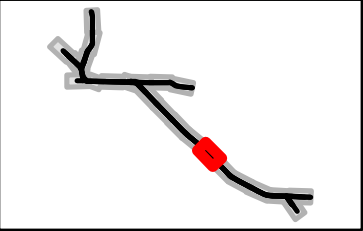


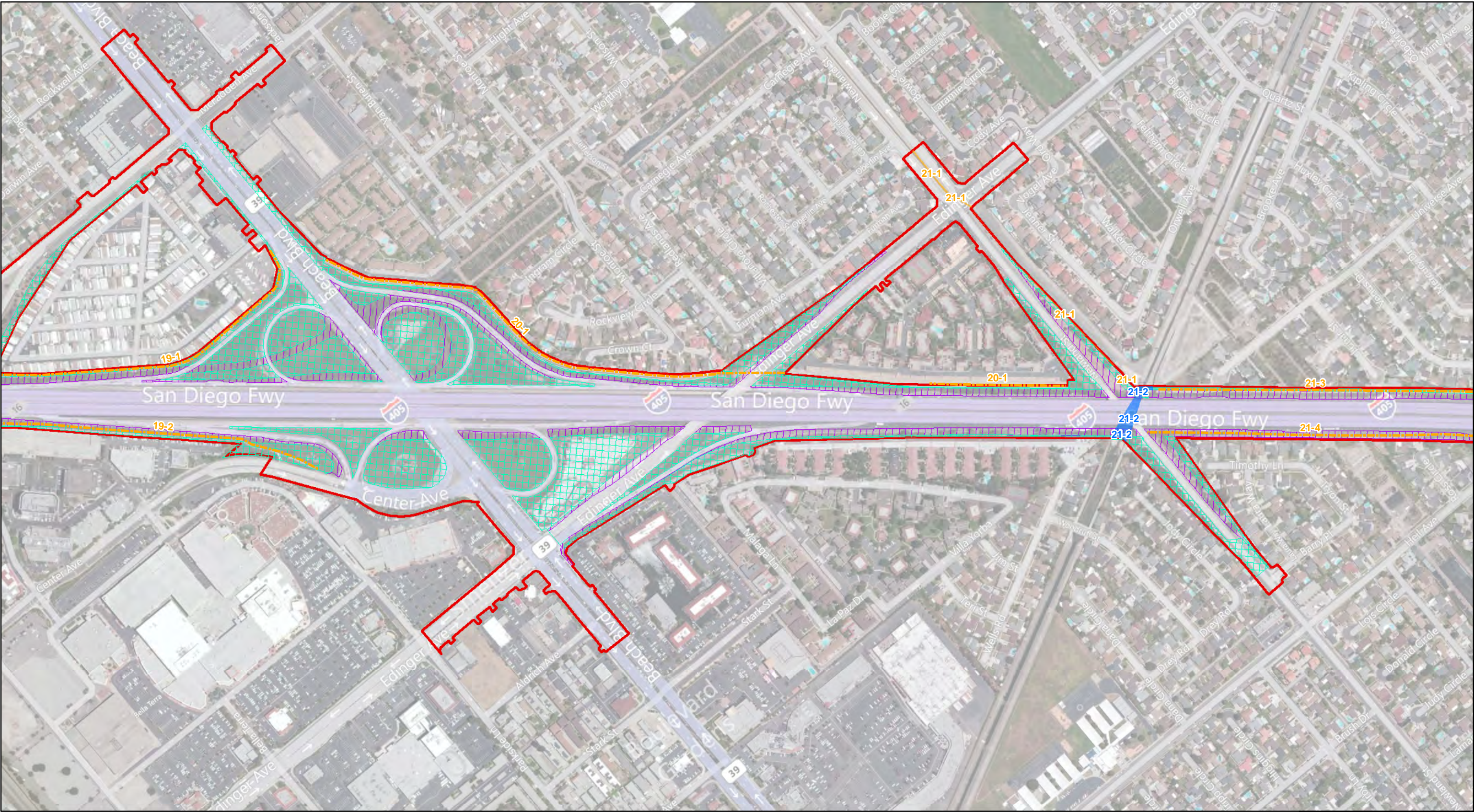


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
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- Alternative 2 Permanent Impact
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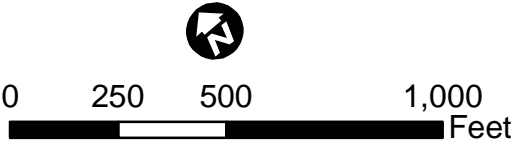


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
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Figure 2-7

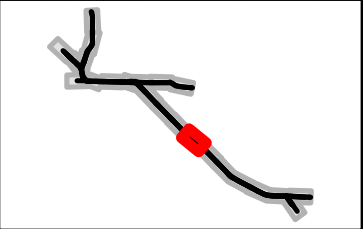


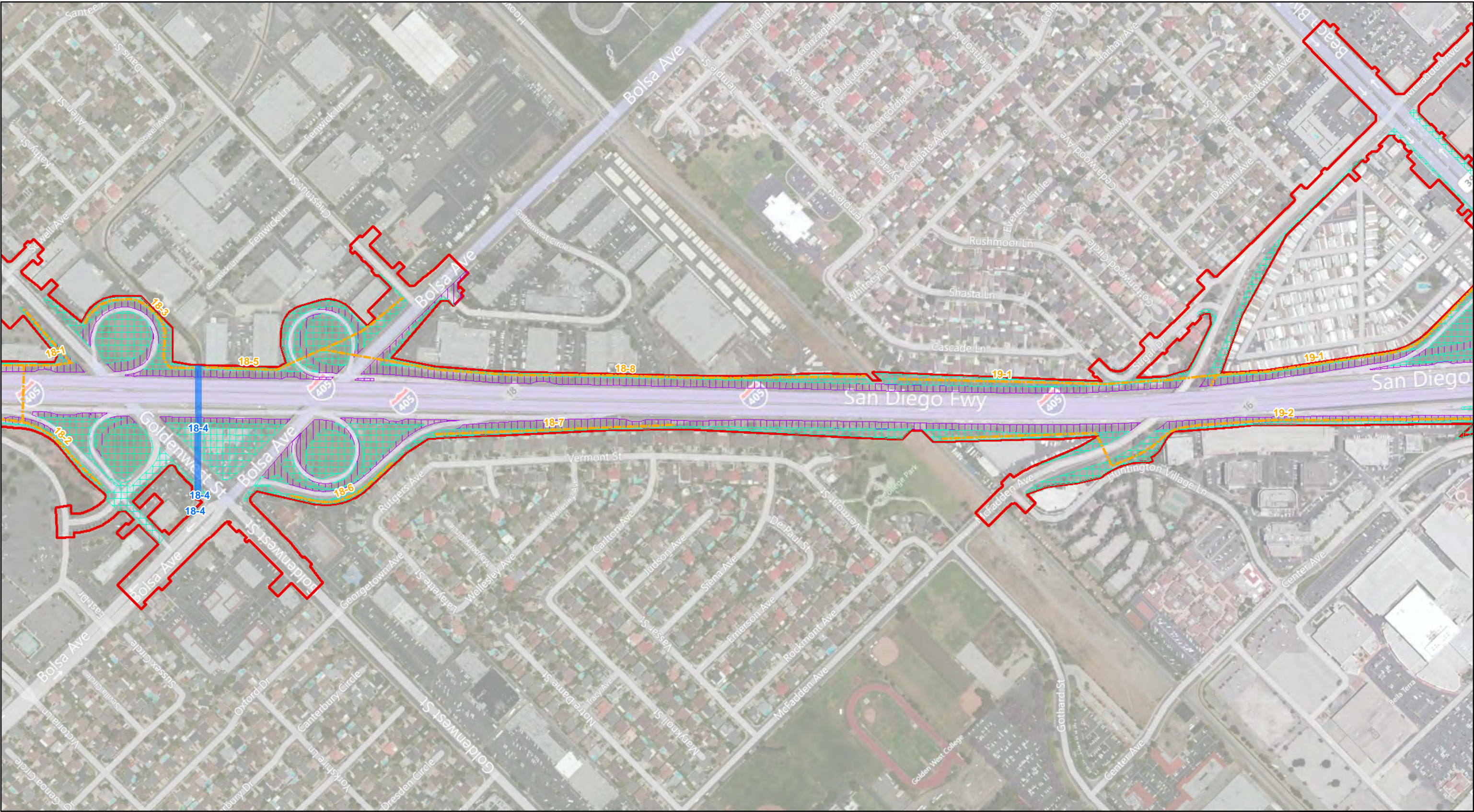


- Study Area
- Alternative 2 Temporary Impact
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- Non-Jurisdictional Feature with Feature ID Number

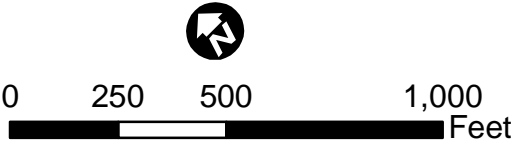


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-8

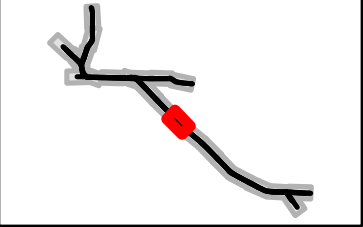


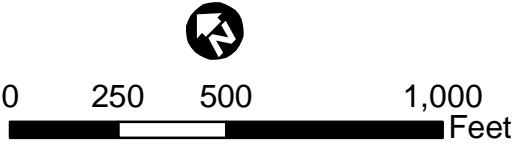
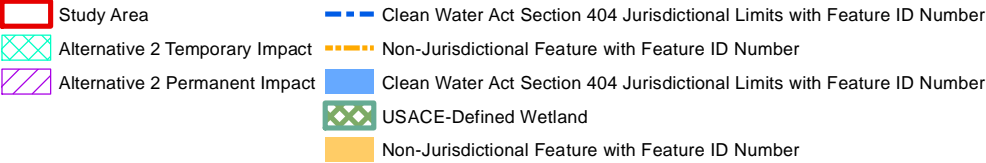
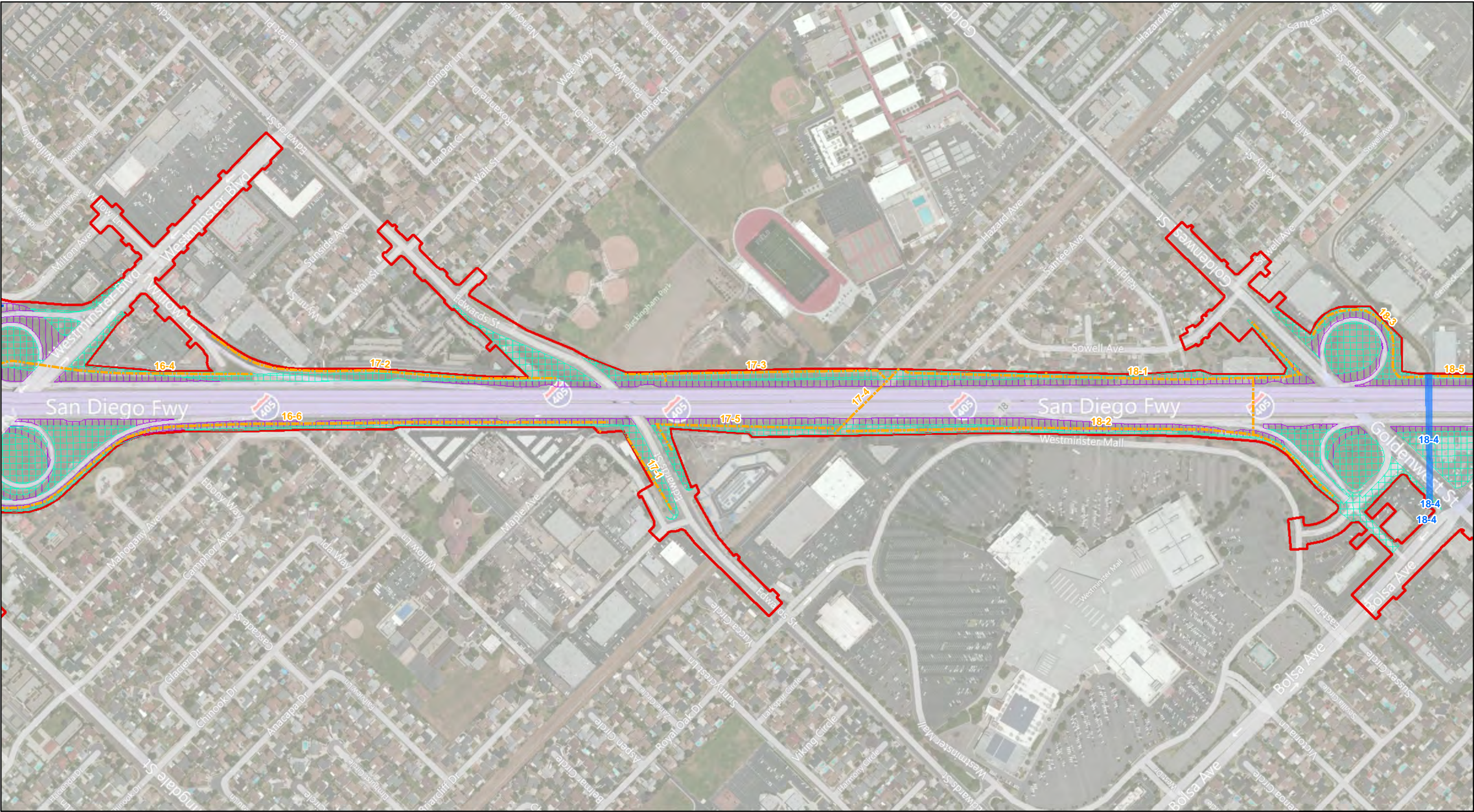


- Study Area
- Alternative 2 Temporary Impact
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- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
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- Non-Jurisdictional Feature with Feature ID Number

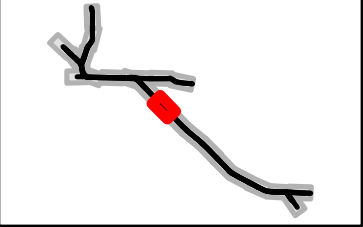


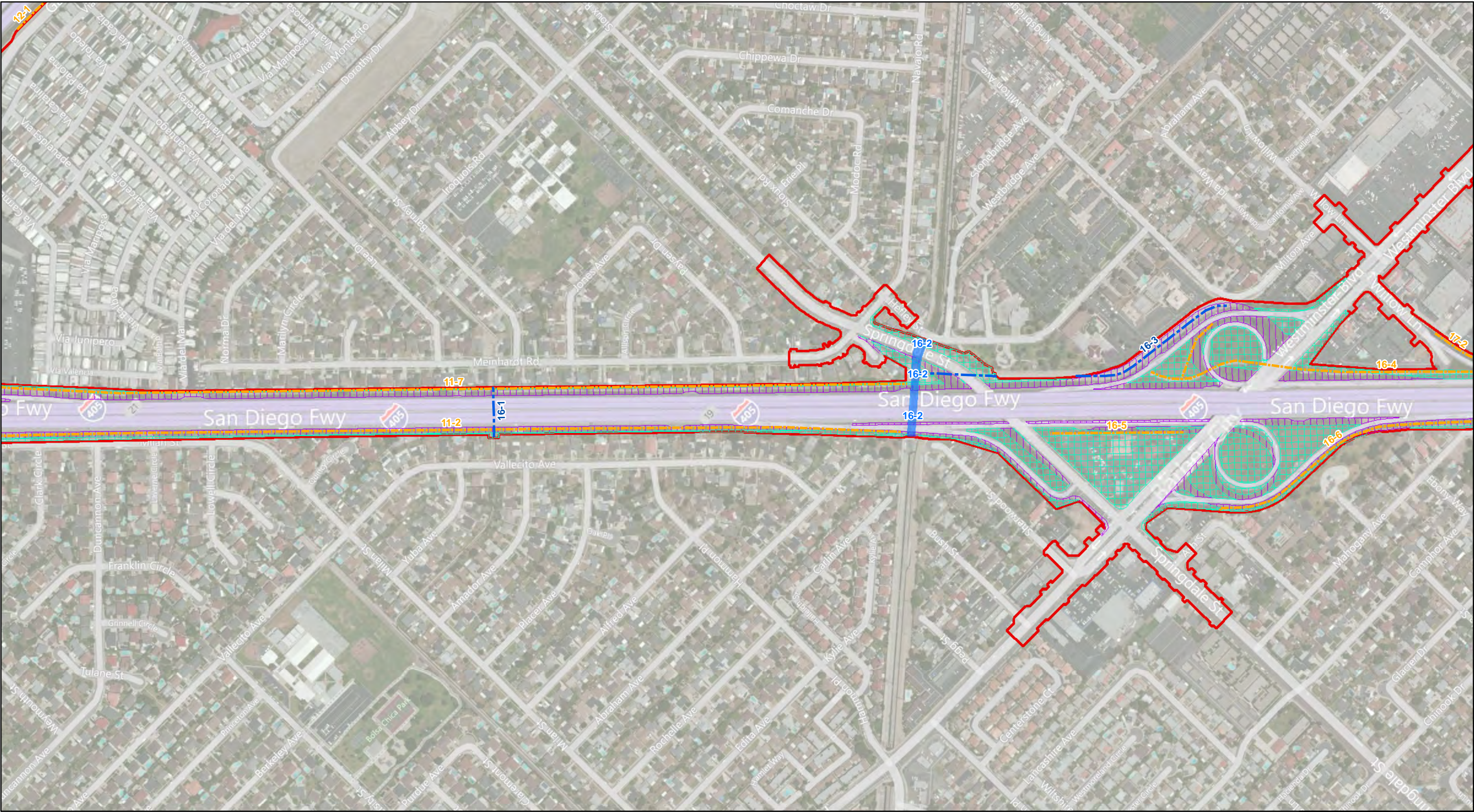
USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-9



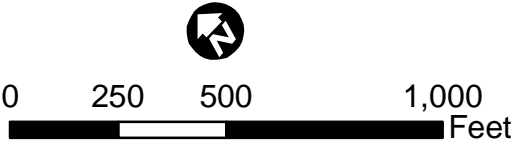


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-10

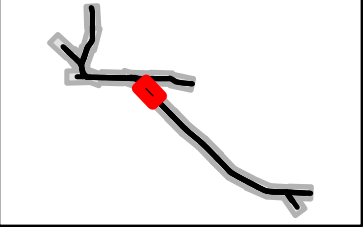




- Study Area
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- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
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March 2012
Figure 2-11

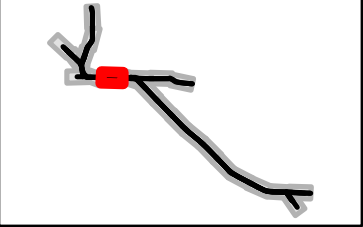


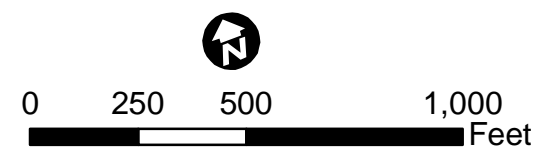
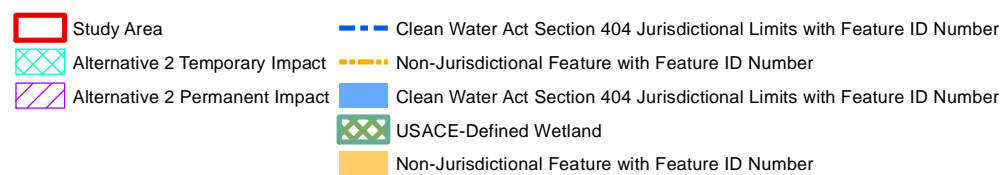


- Study Area
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- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

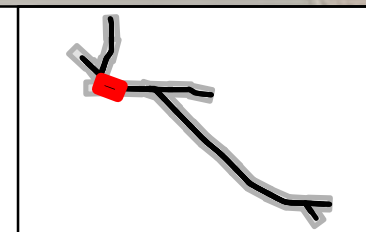


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-13

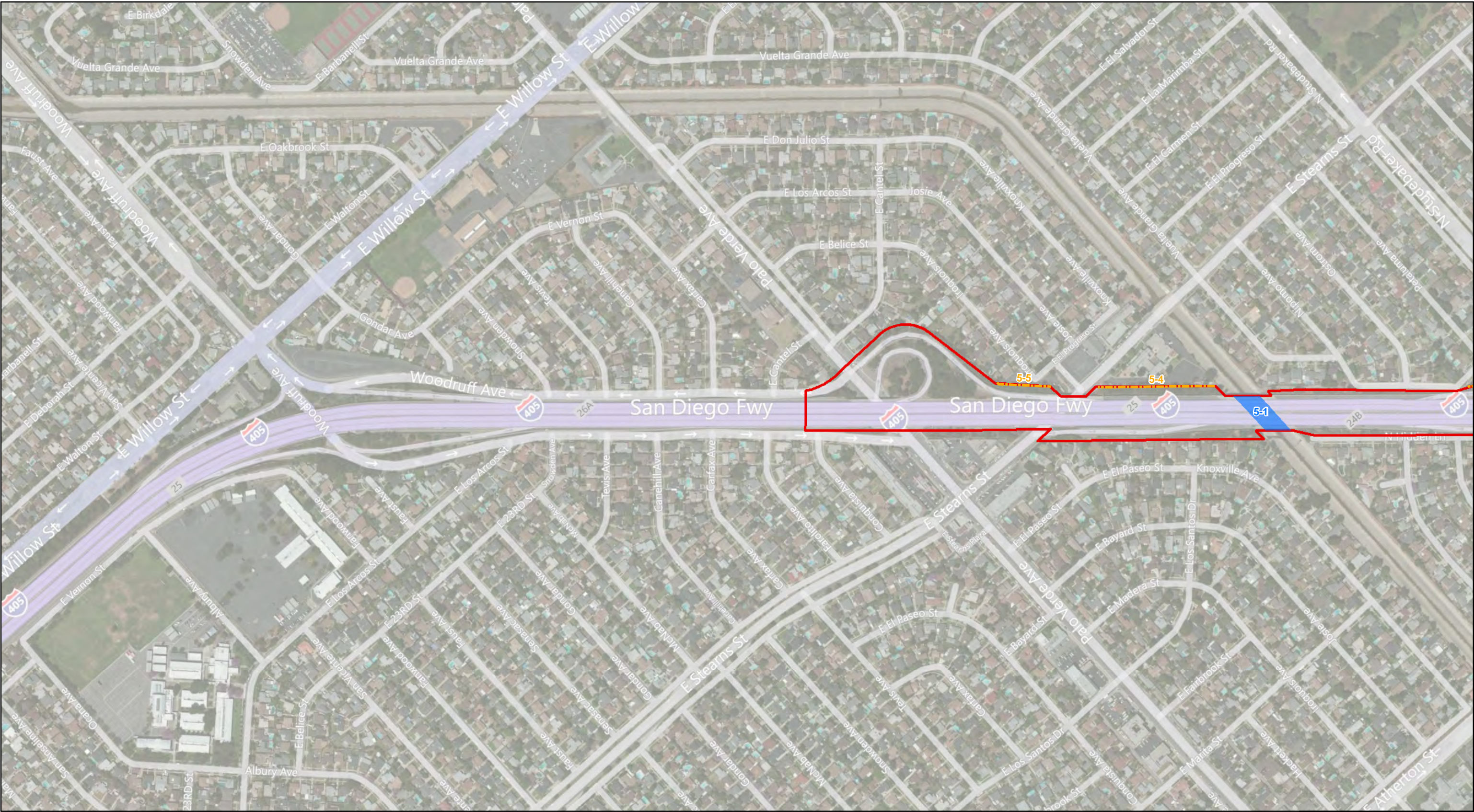




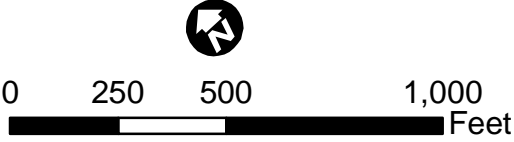
USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-14



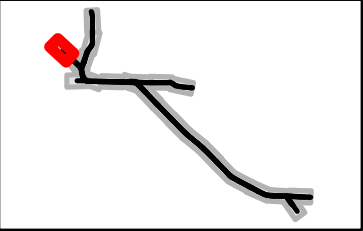




- Study Area
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- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

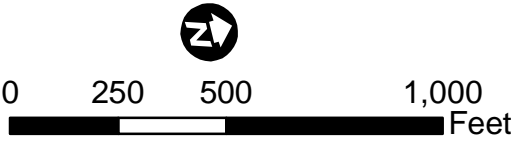


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-16

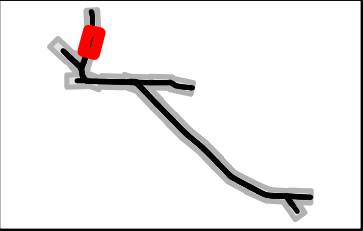




- Study Area
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- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-17





- Study Area

Alternative 2 Temporary Impact

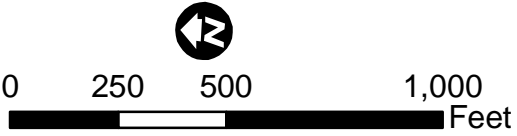
Alternative 2 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number

Non-Jurisdictional Feature with Feature ID Number

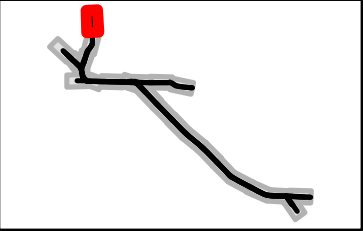
Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number

USACE-Defined Wetland

Non-Jurisdictional Feature with Feature ID Number

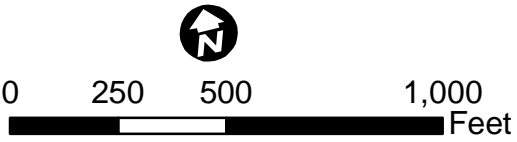


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-18

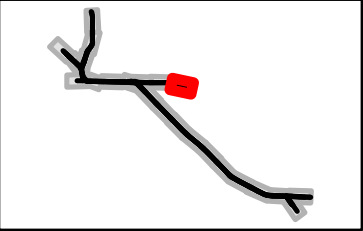


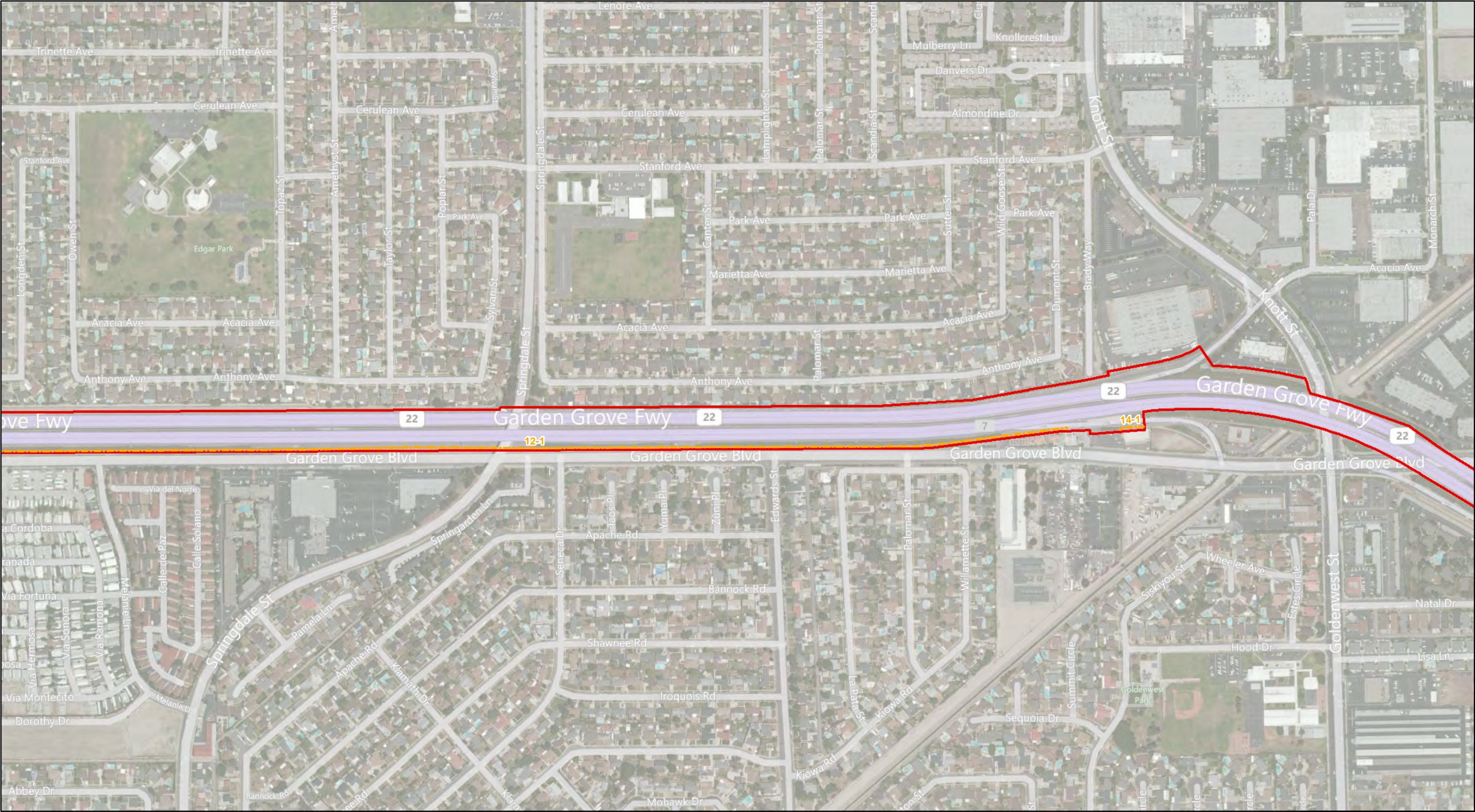


- Study Area
- Alternative 2 Temporary Impact
- Alternative 2 Permanent Impact
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- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-19

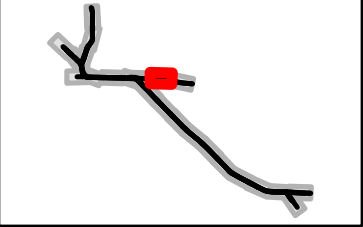


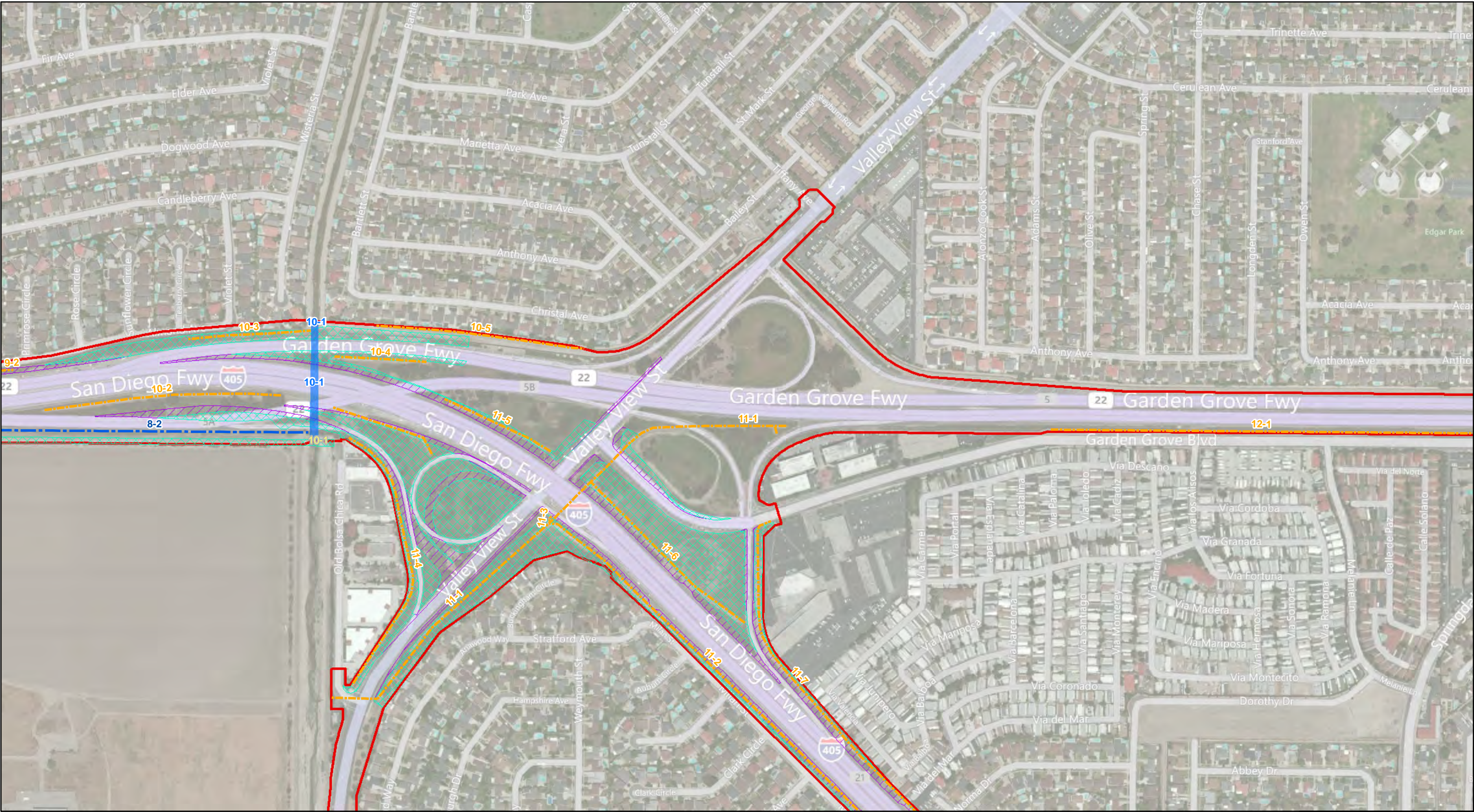


- Study Area
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- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-20

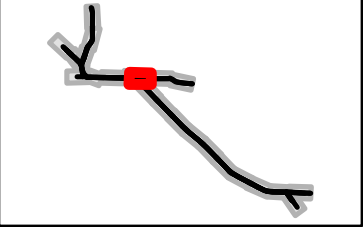




- Study Area
- Alternative 2 Temporary Impact
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- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

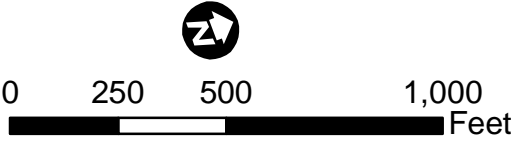


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-21

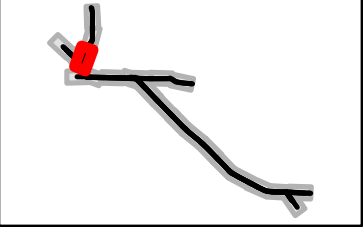


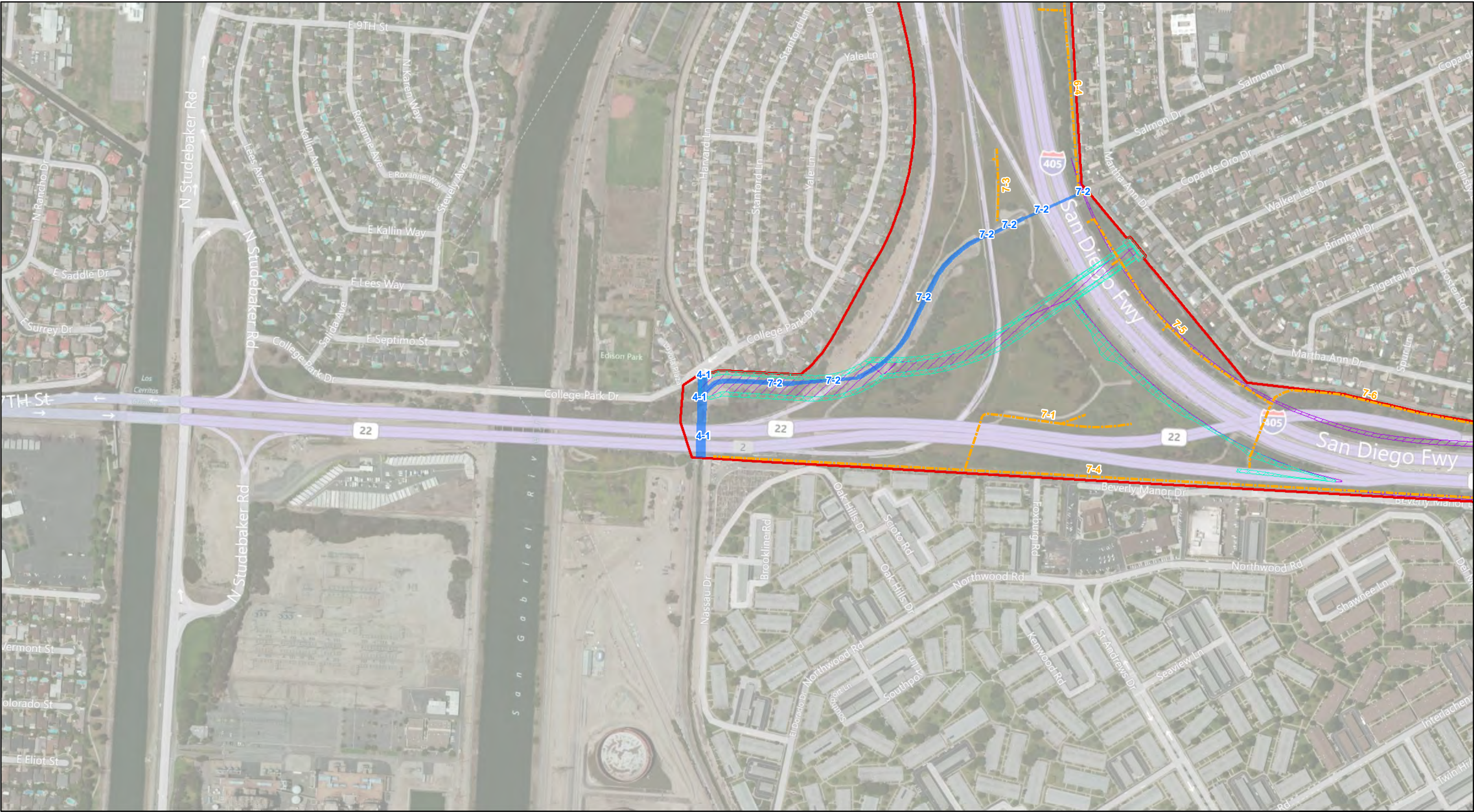


- Study Area
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- USACE-Defined Wetland
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USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-22

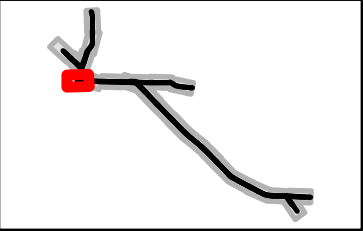




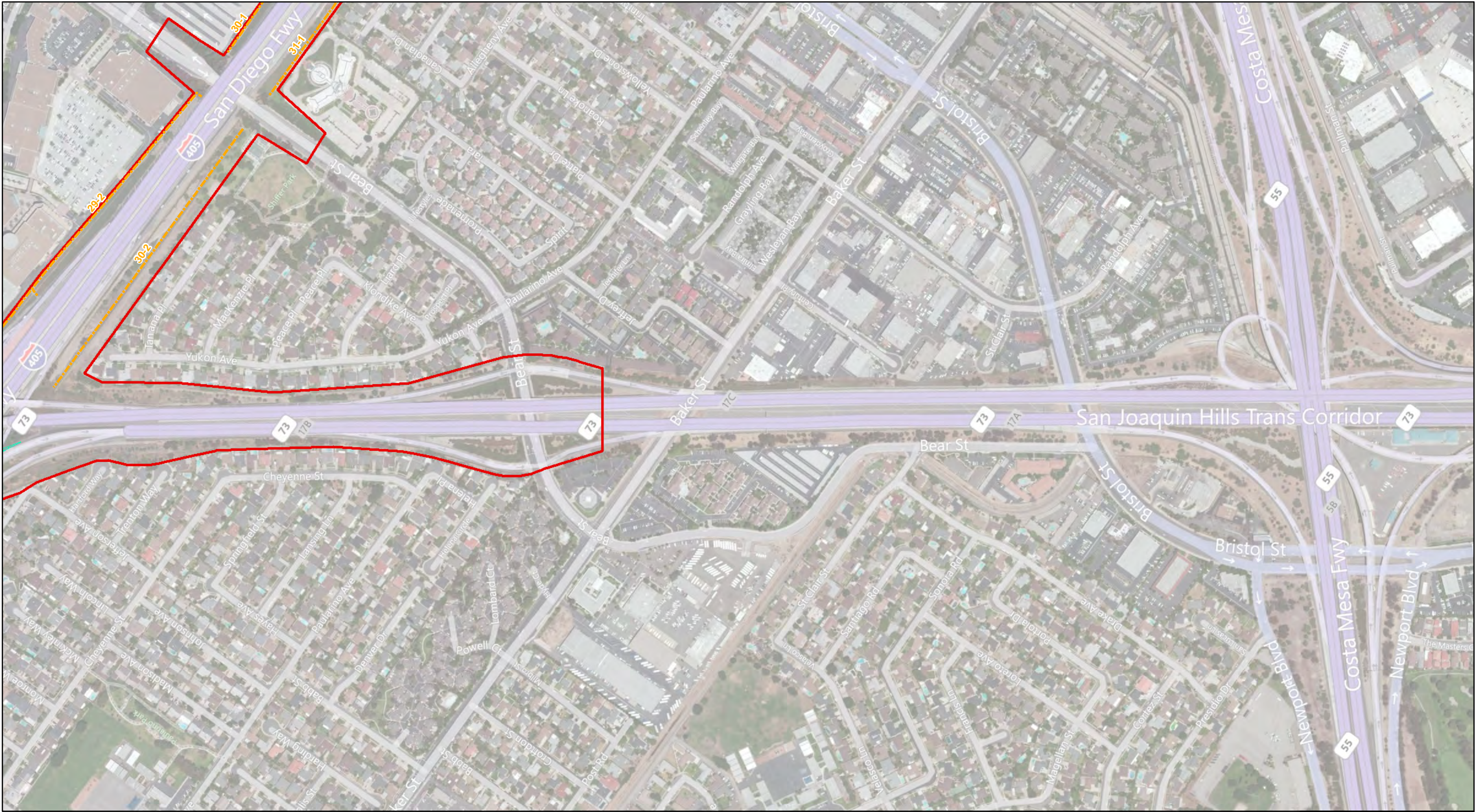
- Study Area
- Alternative 2 Temporary Impact
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- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
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- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



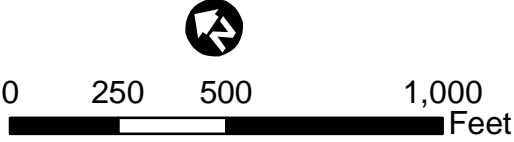
USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 2
March 2012
Figure 2-23



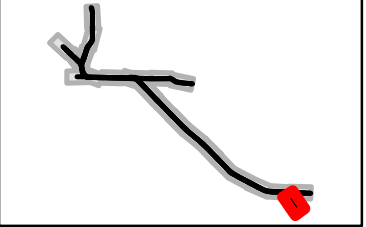
07: Alternative 3 Impacts to USACE, RWQCB, and CDFG Jurisdictional Drainages

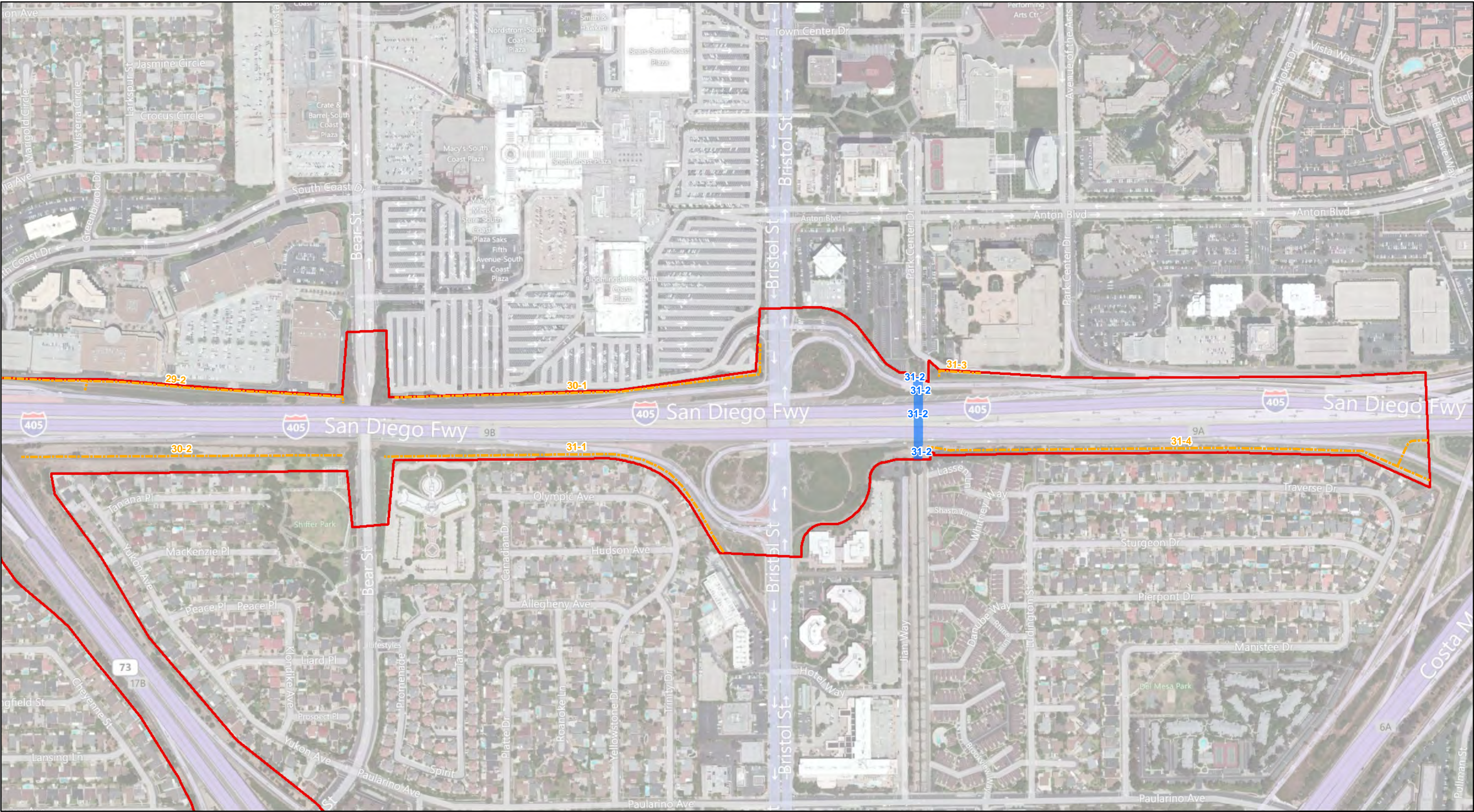


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
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- USACE-Defined Wetland
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USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-1

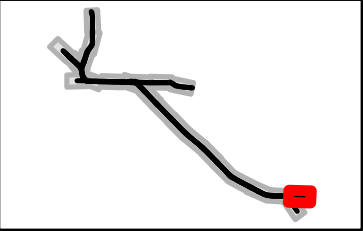


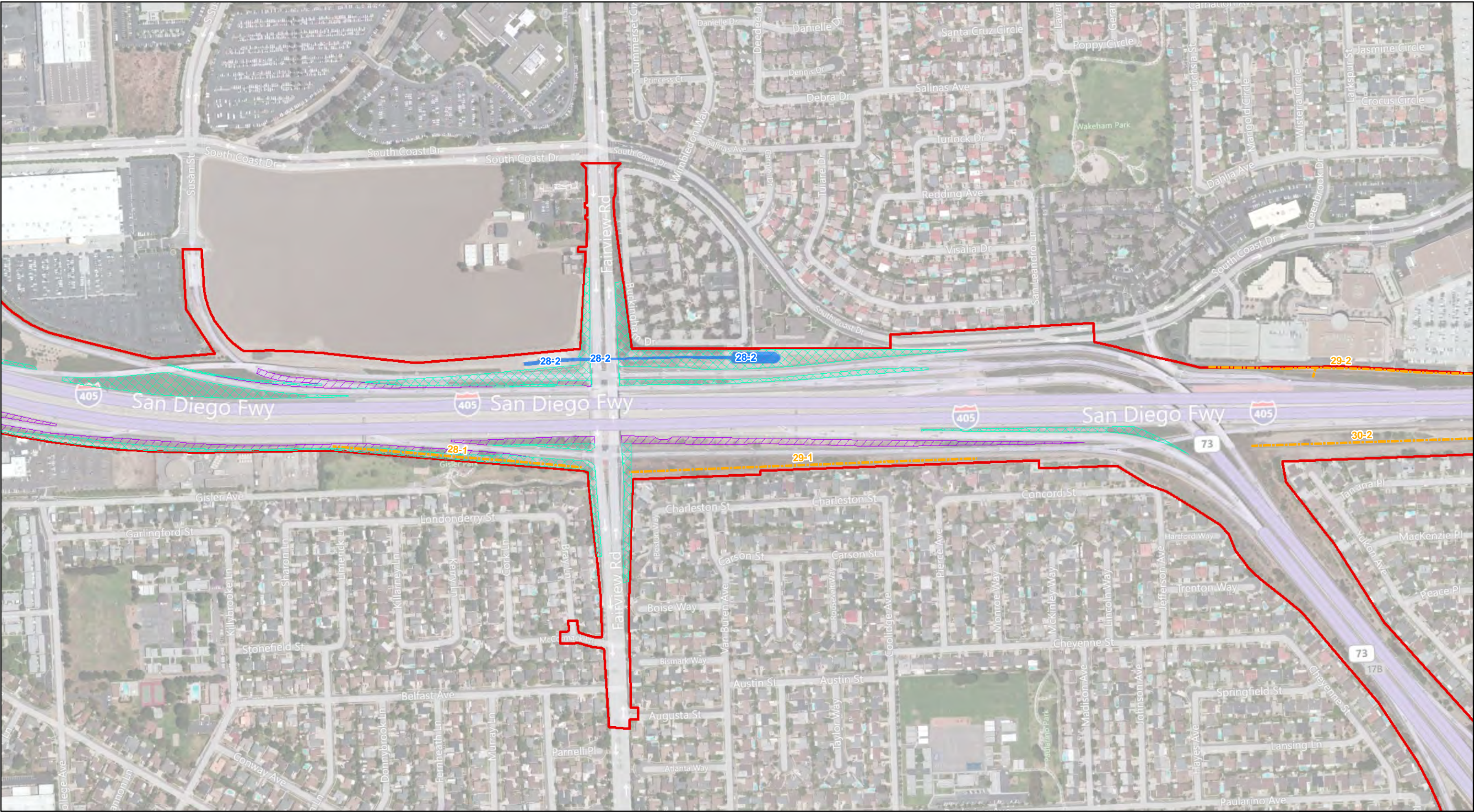


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USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-2

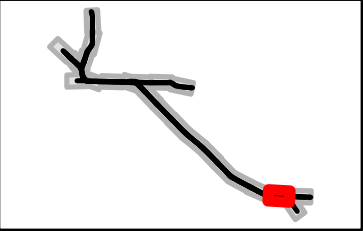


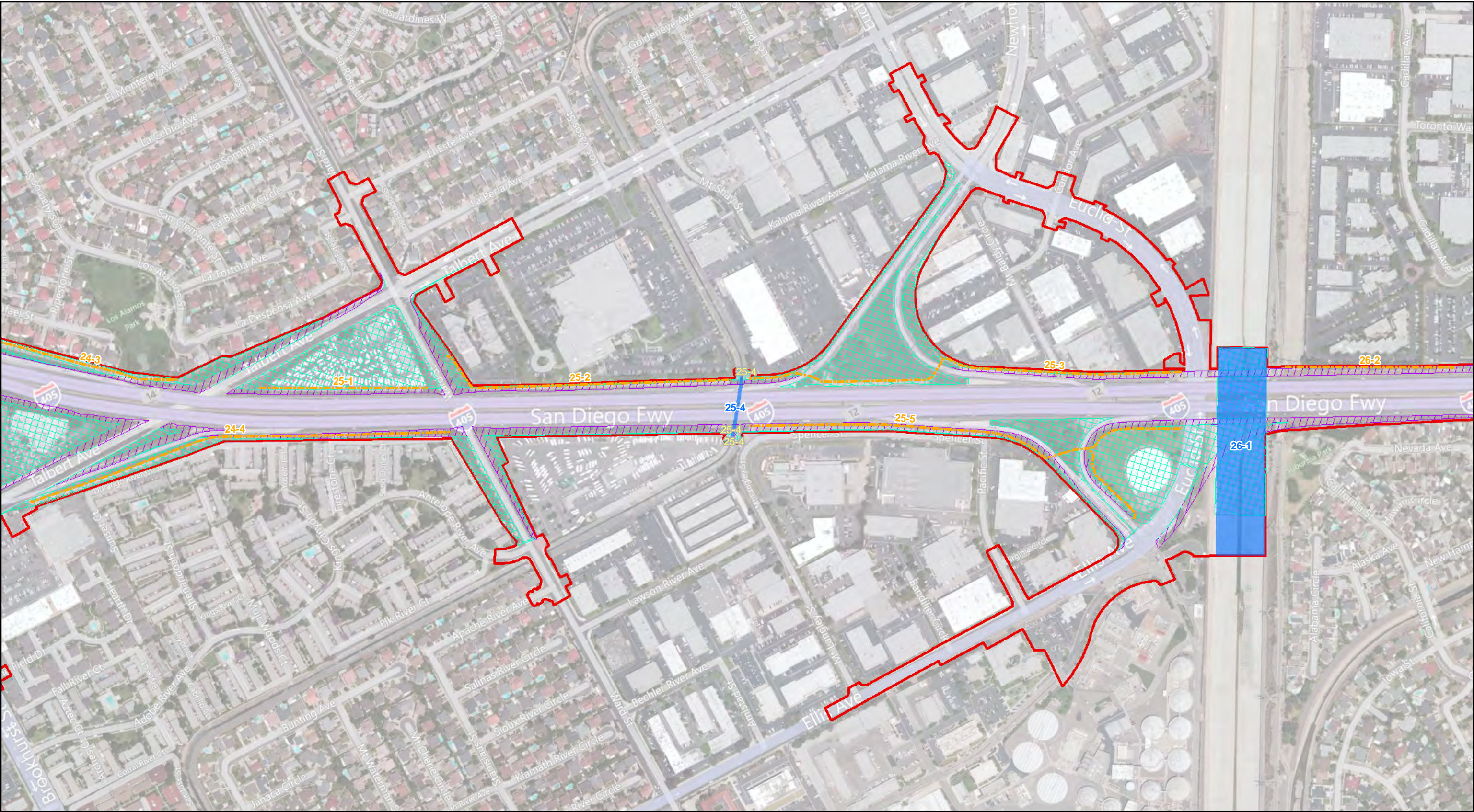


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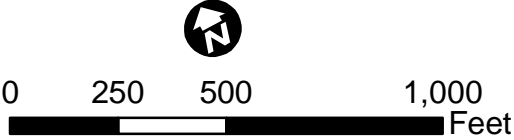


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-3

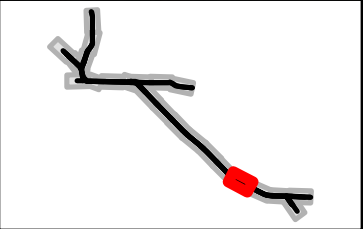


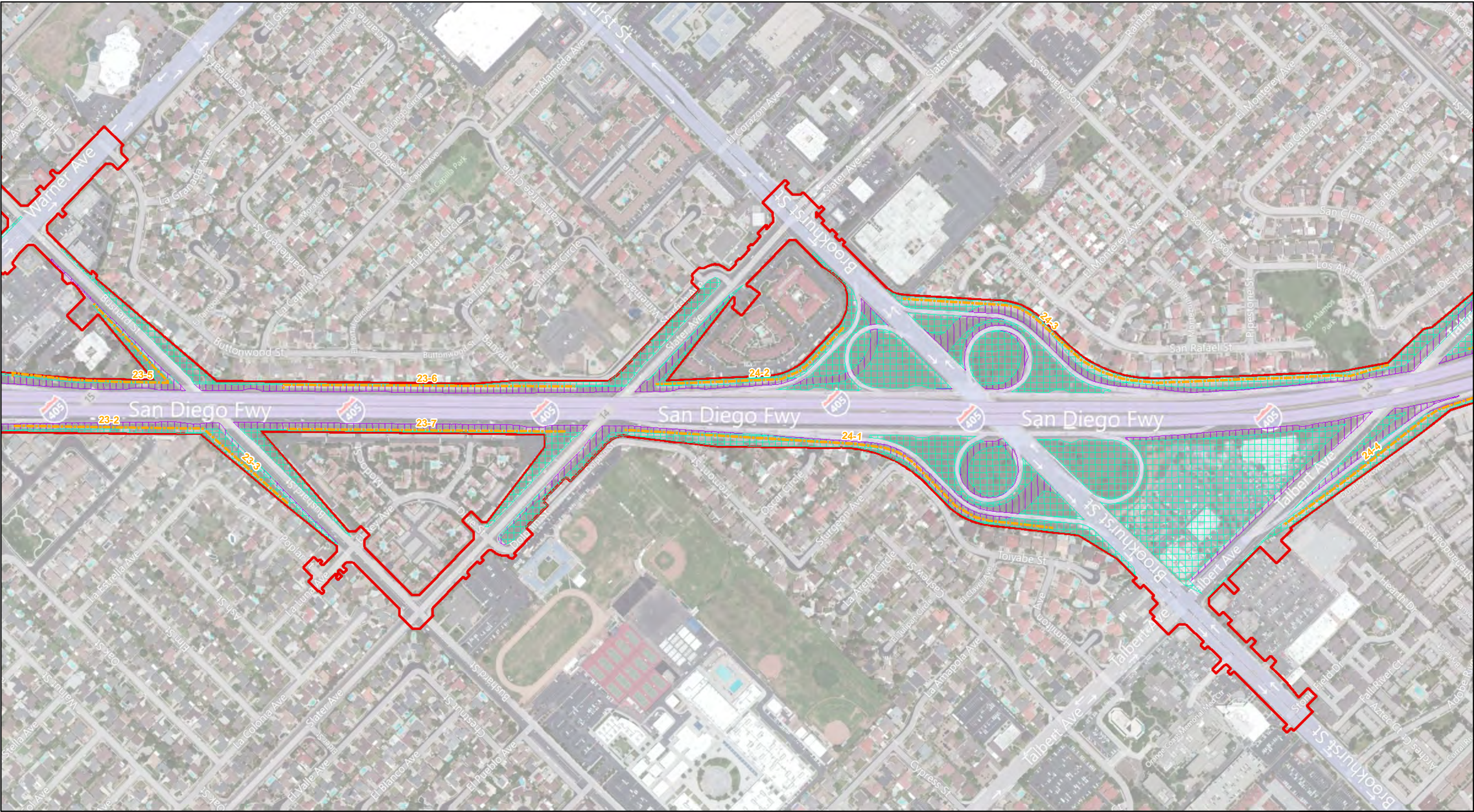


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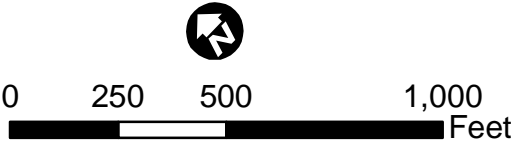


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-5

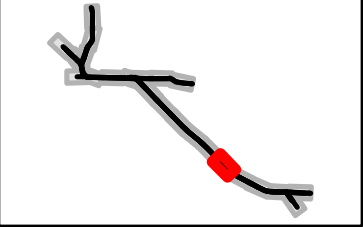


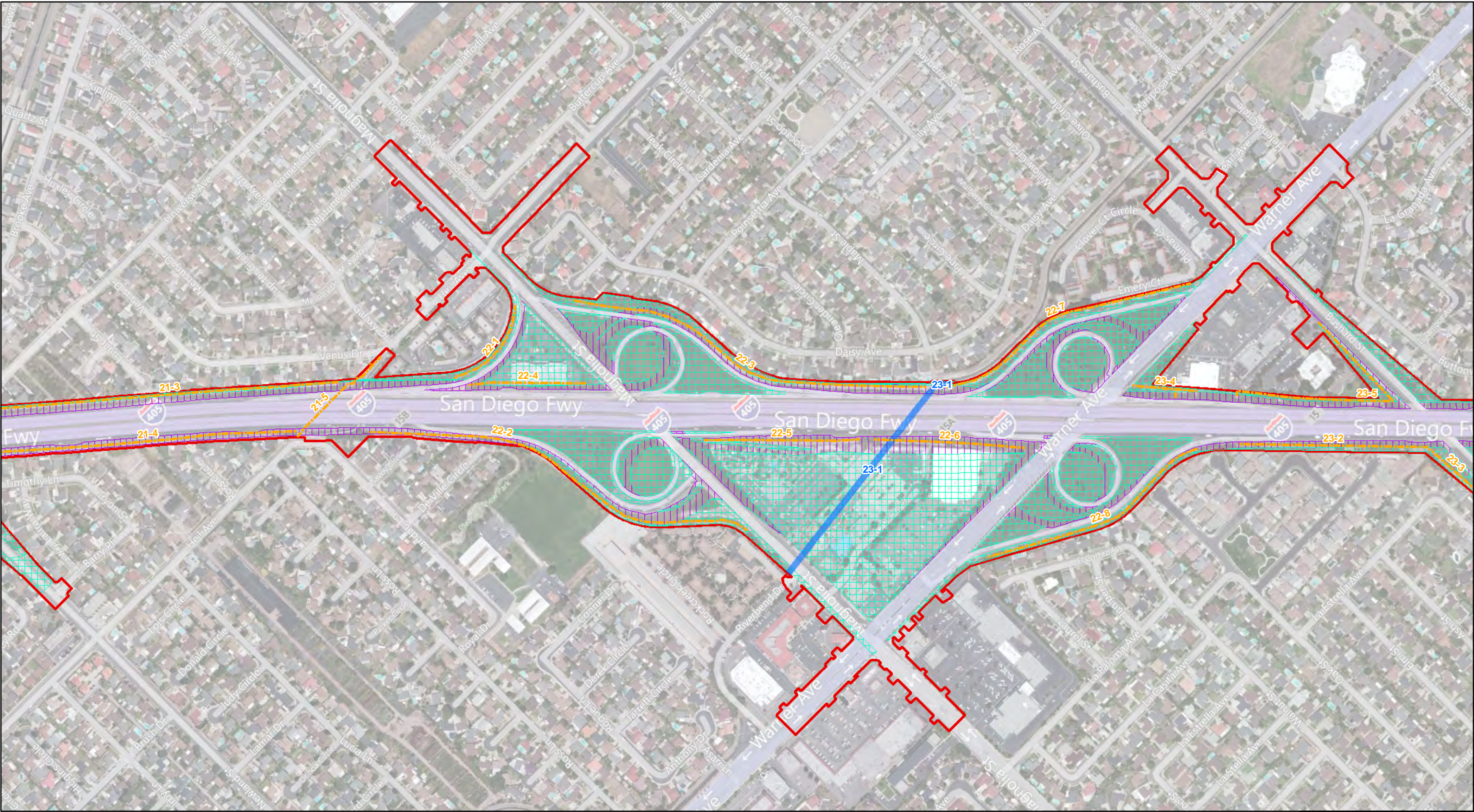


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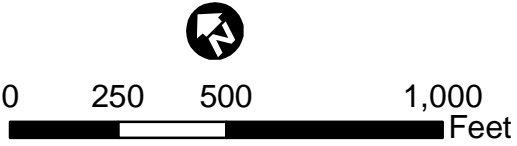


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-6

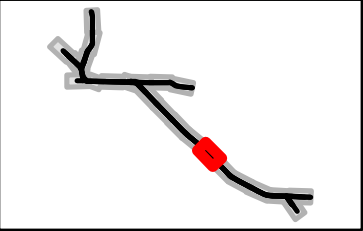


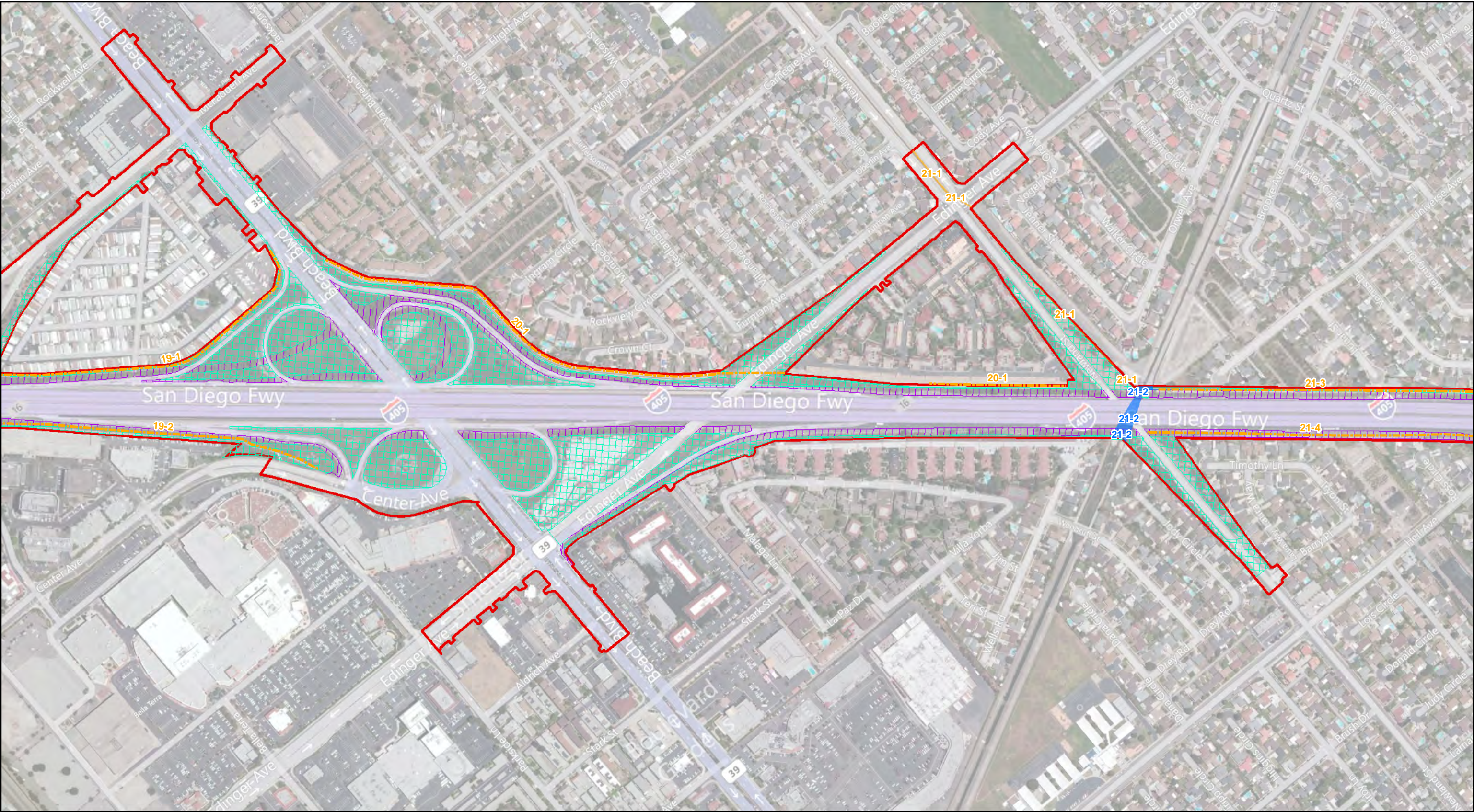


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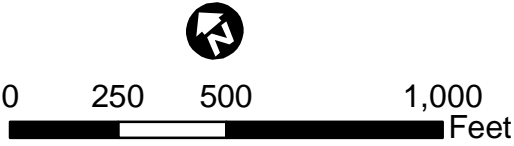


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-7

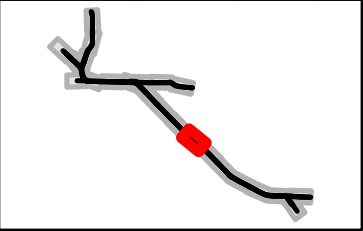


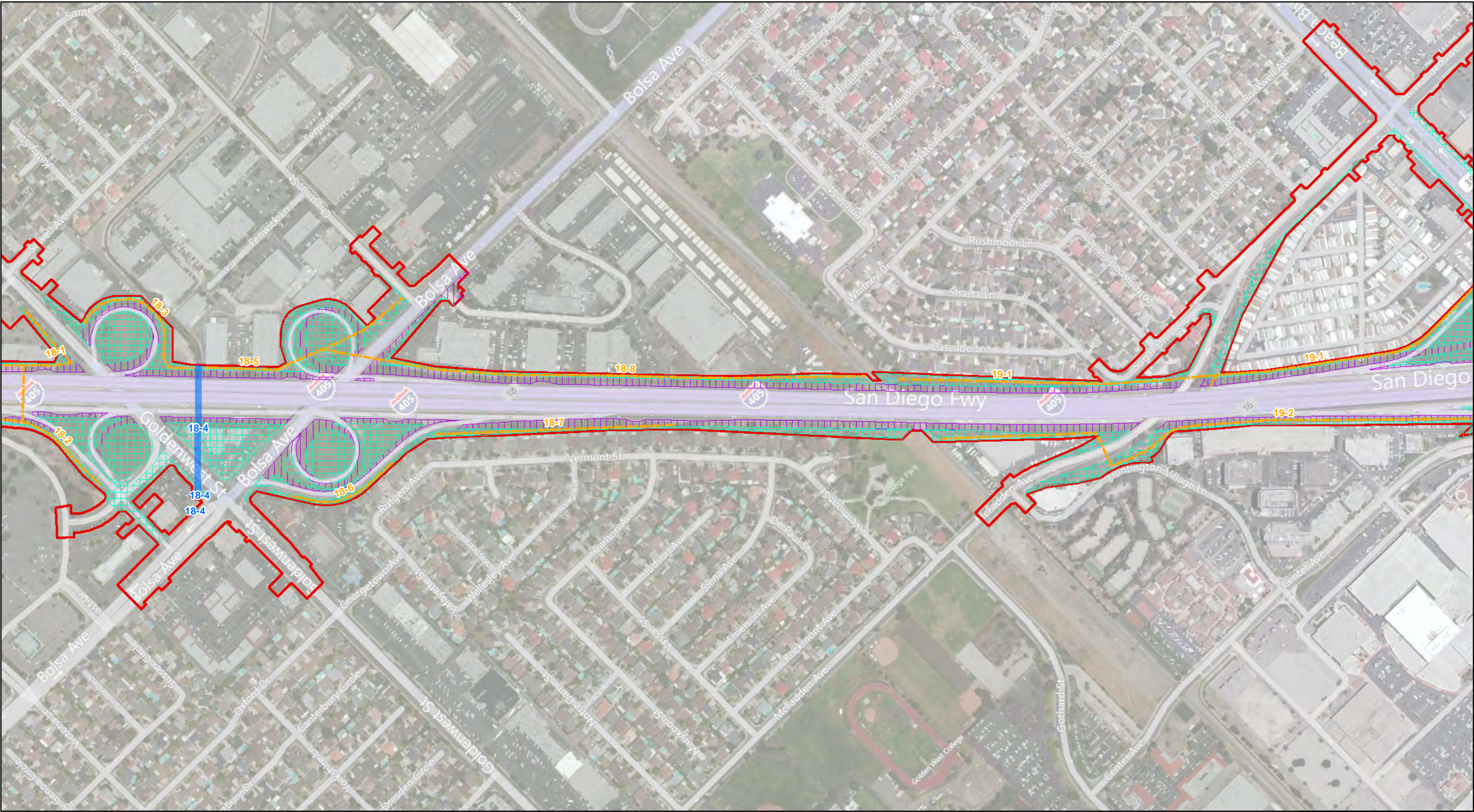


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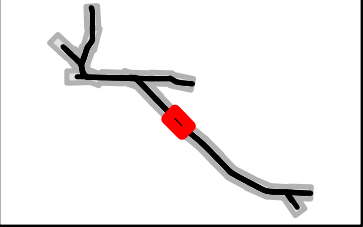
USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-8

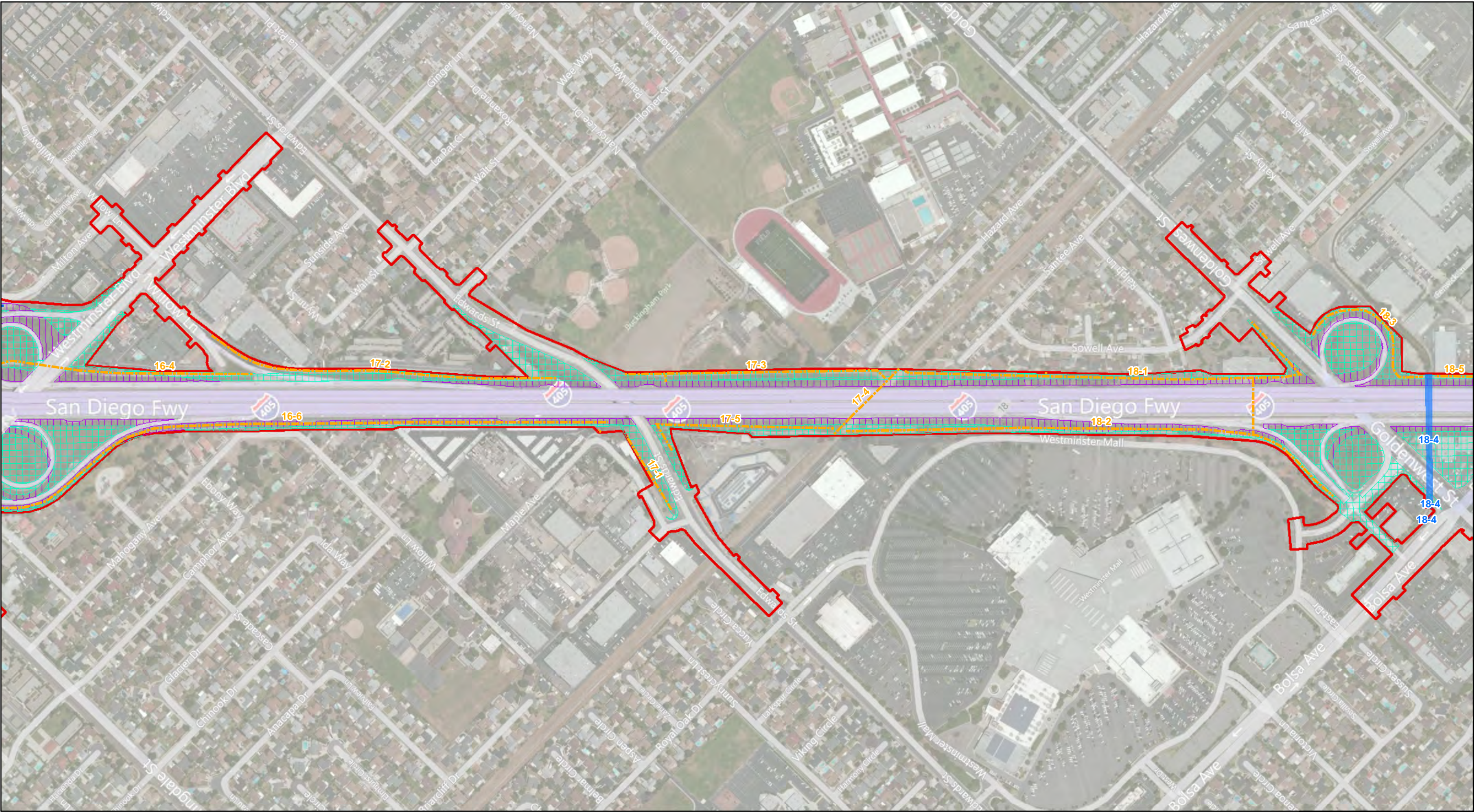




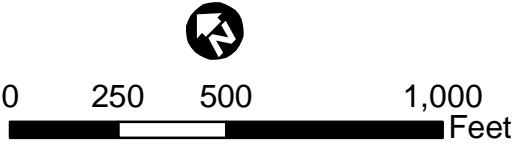
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USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-9

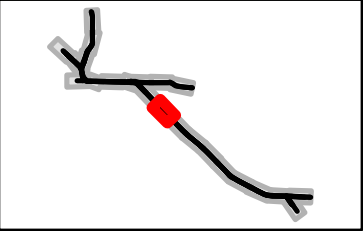


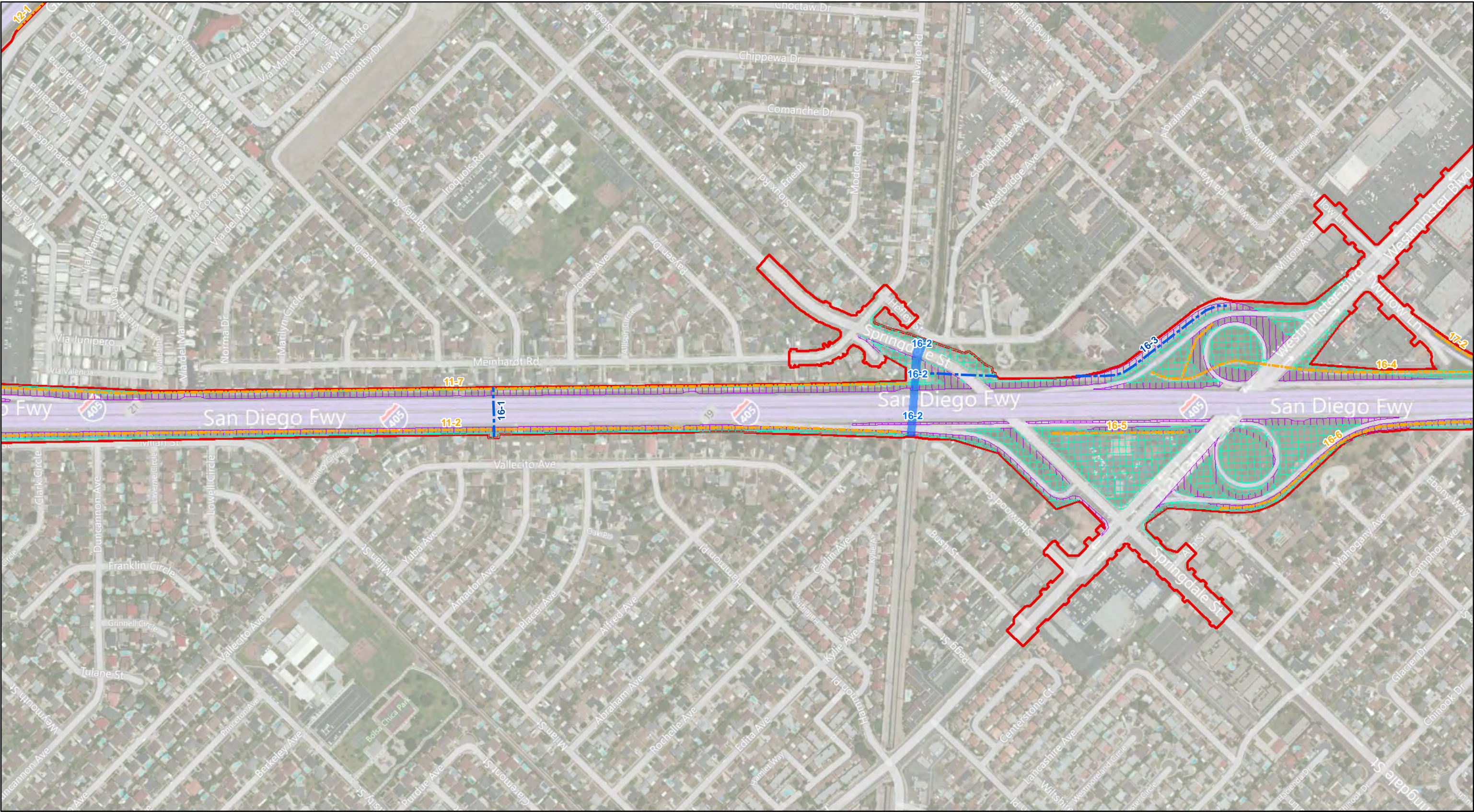


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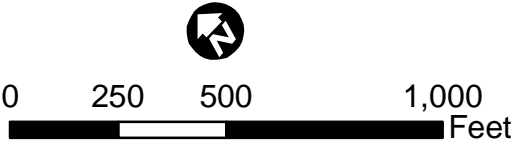


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-10

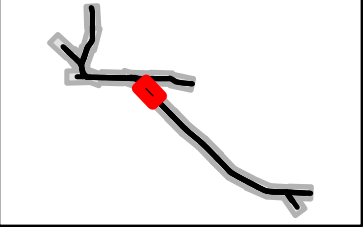


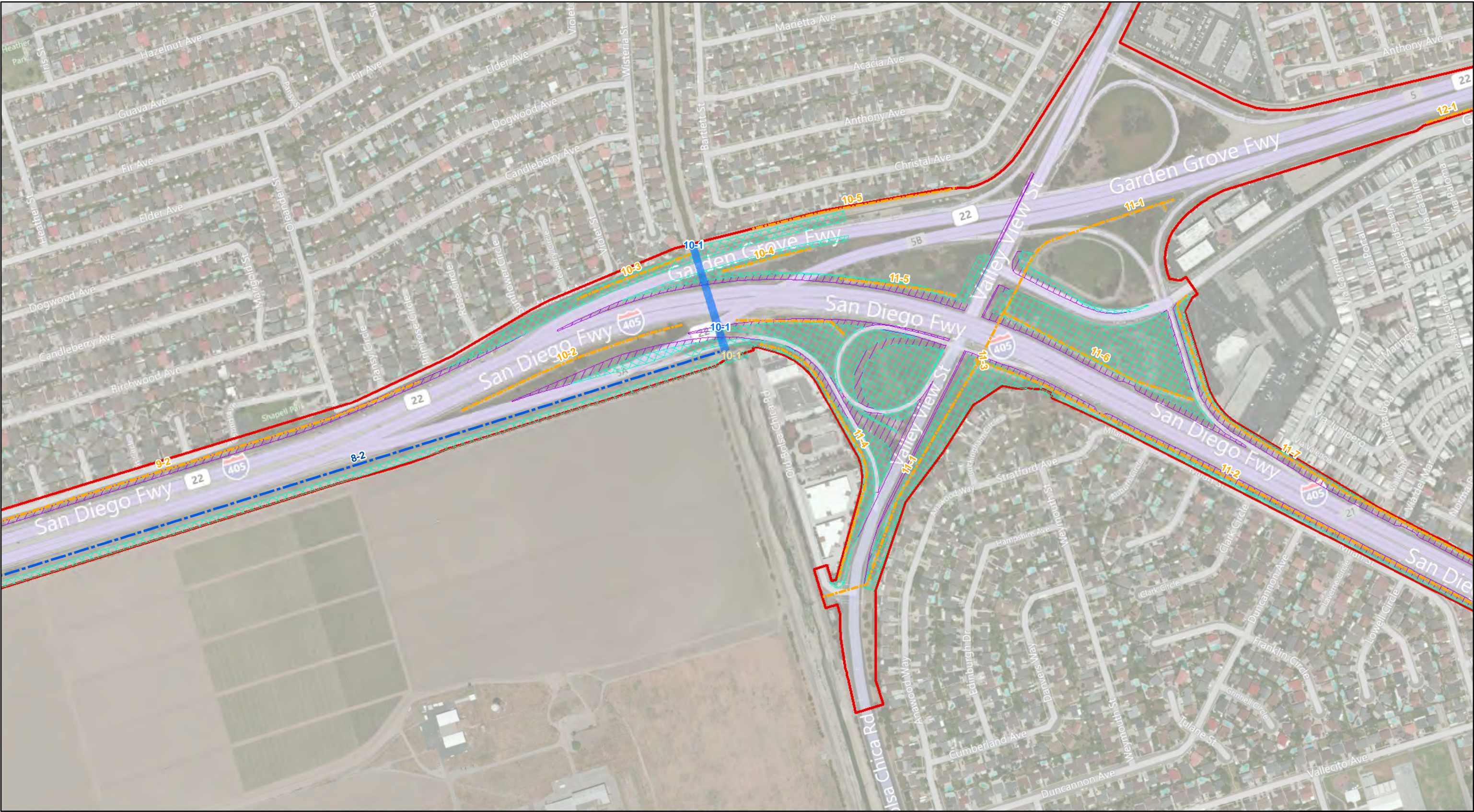


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 3 Temporary Impact
- Alternative 3 Permanent Impact
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

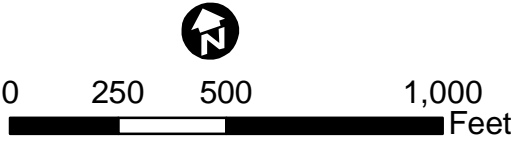


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-11

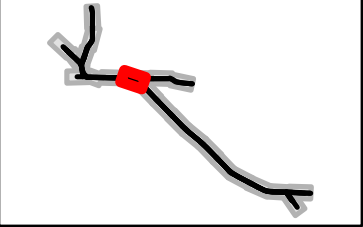




- Study Area
- Alternative 3 Temporary Impact
- Alternative 3 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-12

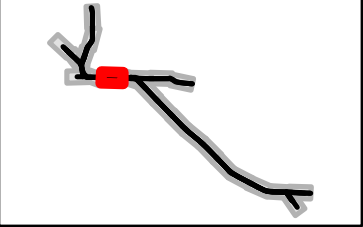


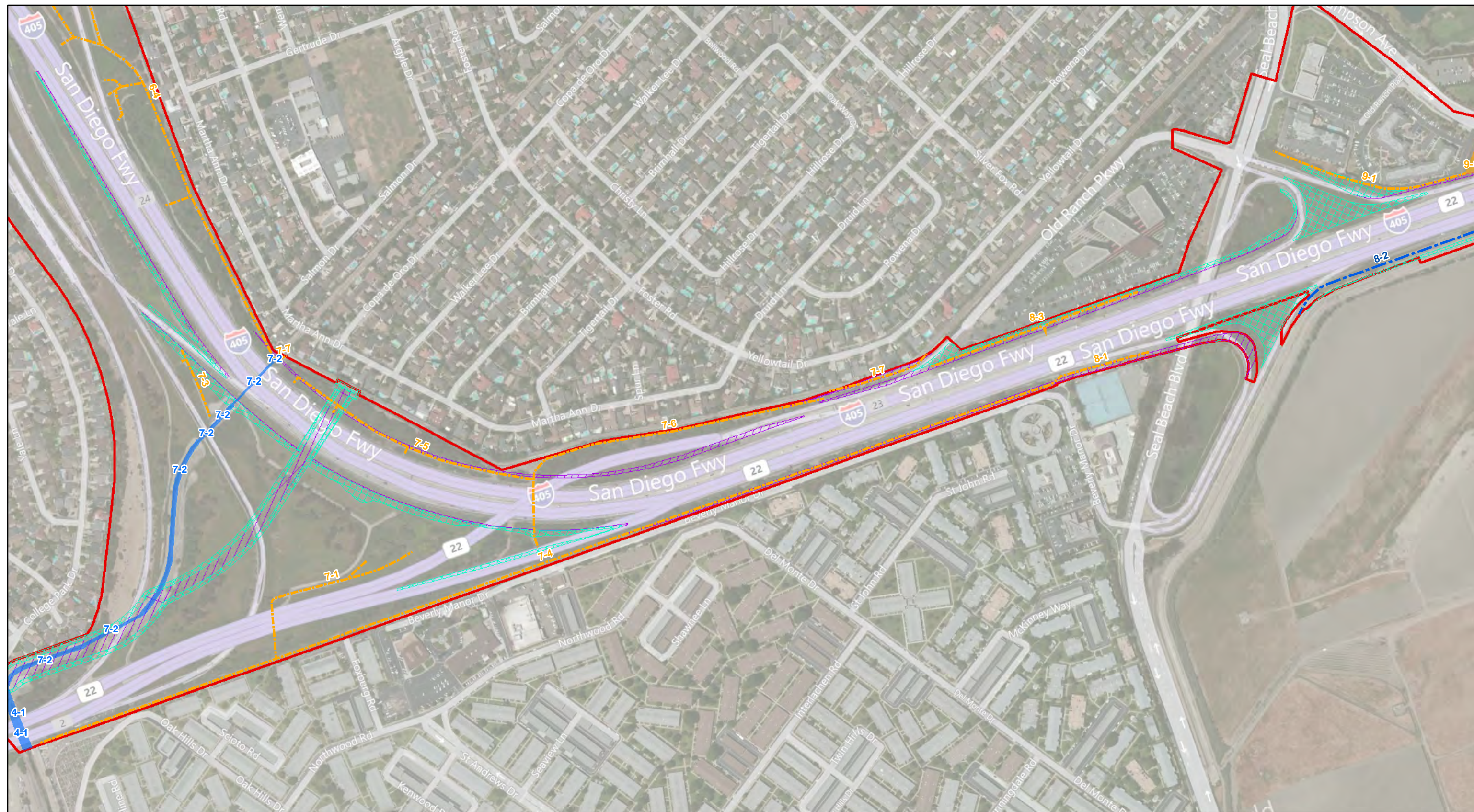


- Study Area
- Alternative 3 Temporary Impact
- Alternative 3 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-13

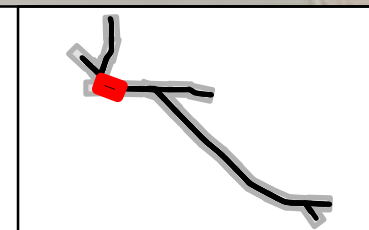


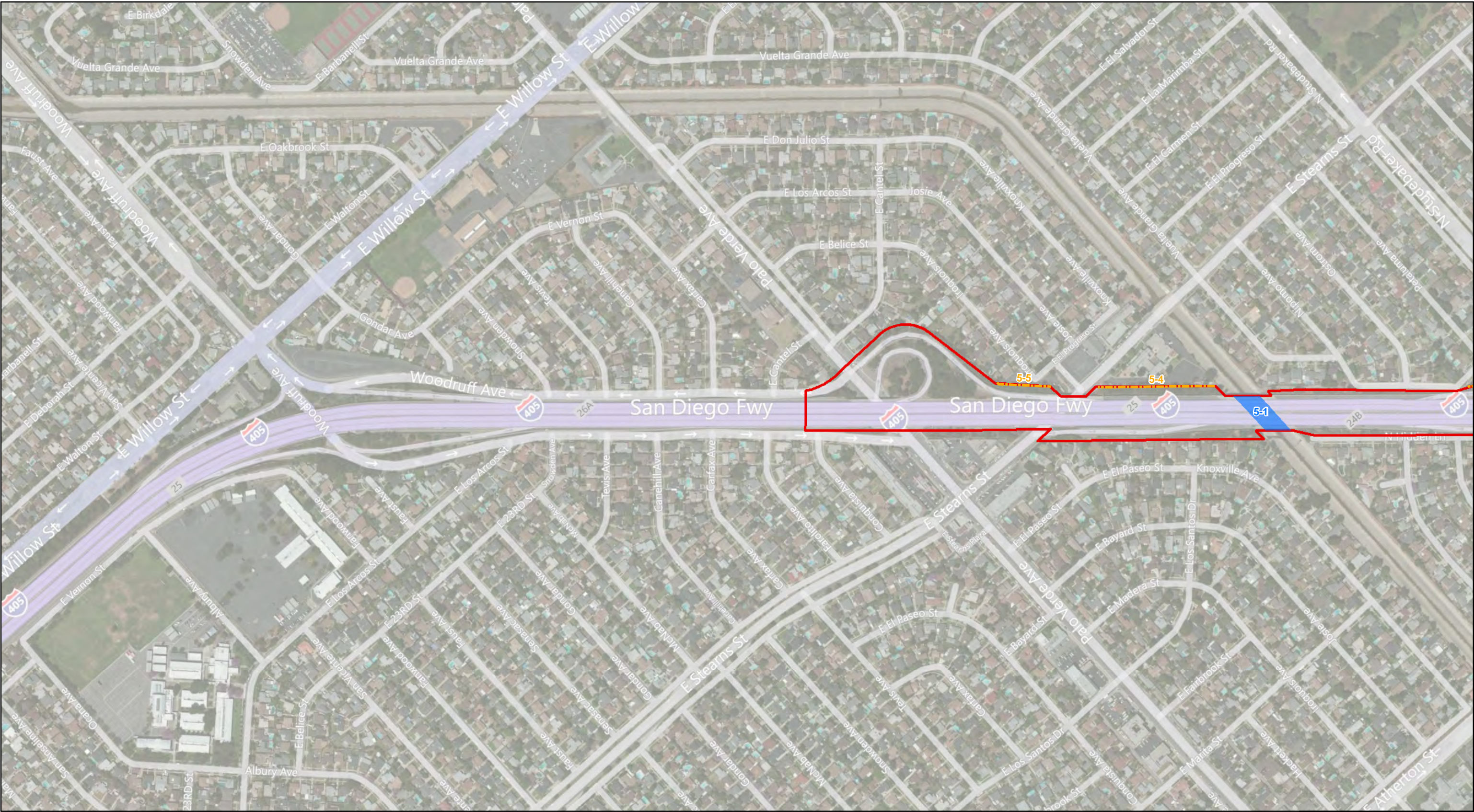


- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 3 Temporary Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 3 Permanent Impact

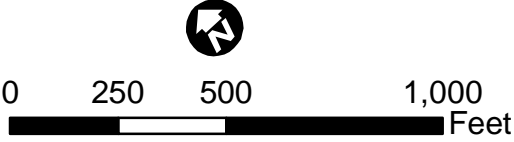


USACE, RWQCB, CDFG
 Drainage Exhibit
 Alternative 3
 March 2012
 Figure 3-14

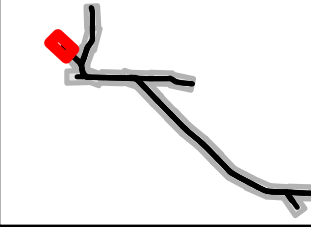




- Study Area
- Alternative 3 Temporary Impact
- Alternative 3 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

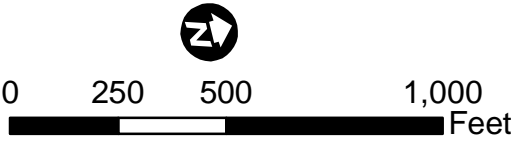


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-16

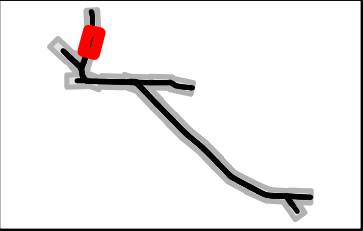




- Study Area
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Alternative 3 Temporary Impact
- Non-Jurisdictional Feature with Feature ID Number
- Alternative 3 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number

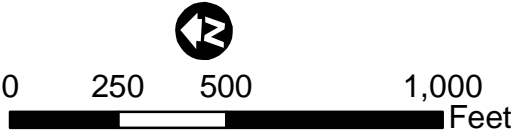


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-17

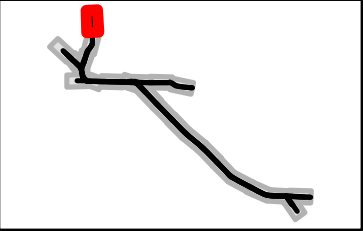




- Study Area
- Alternative 3 Temporary Impact
- Alternative 3 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number

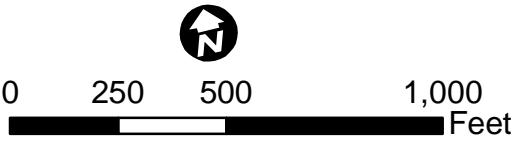


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-18

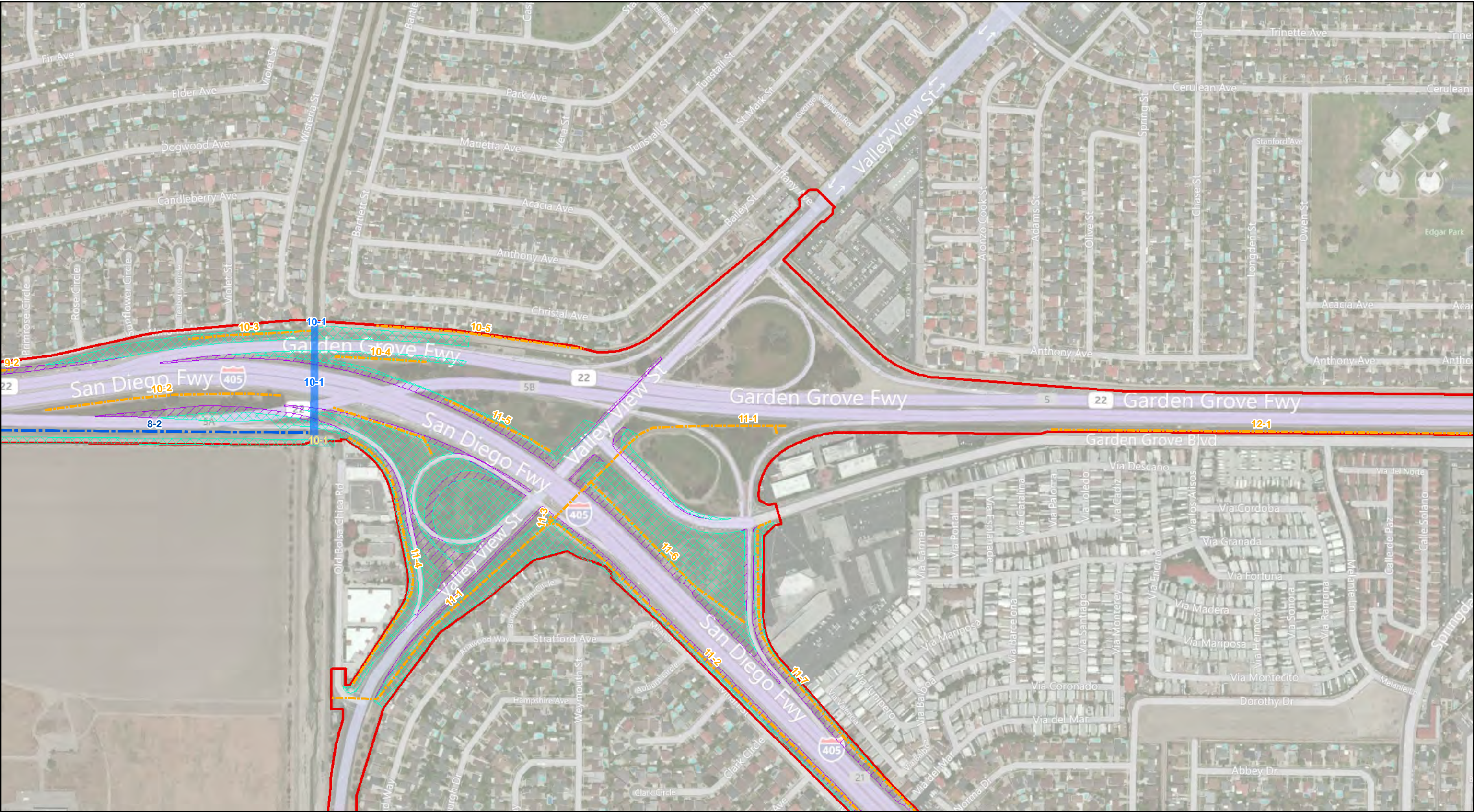




- Study Area
- Alternative 3 Temporary Impact
- Alternative 3 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number



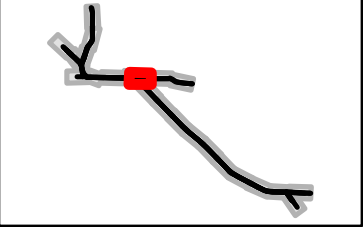
USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-19

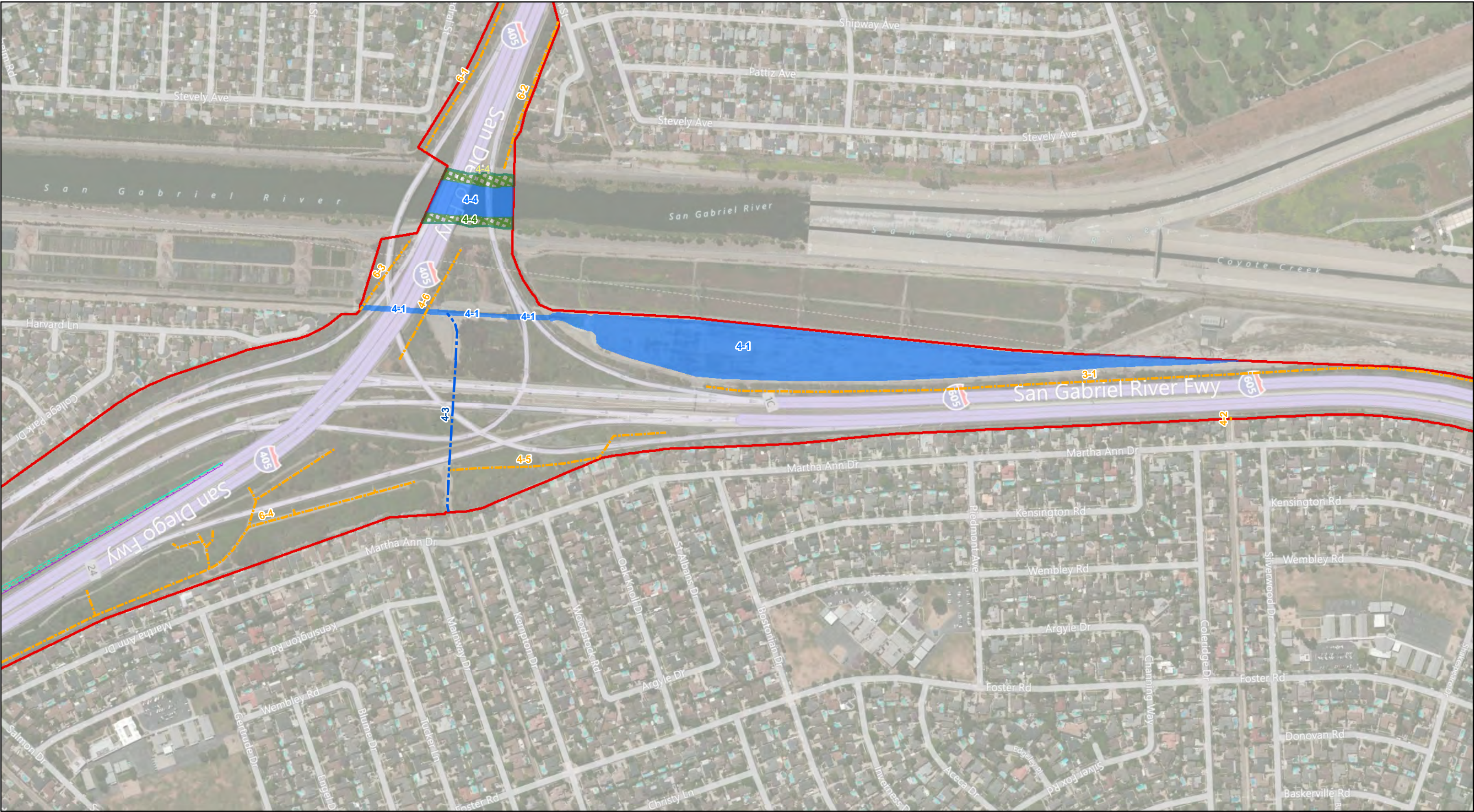


- | | |
|--------------------------------|--|
| Study Area | Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number |
| Alternative 3 Temporary Impact | Non-Jurisdictional Feature with Feature ID Number |
| Alternative 3 Permanent Impact | Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number |
| | USACE-Defined Wetland |
| | Non-Jurisdictional Feature with Feature ID Number |

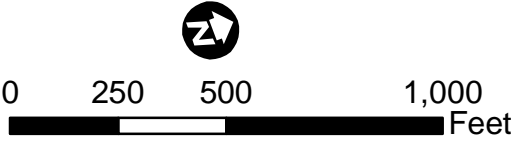


USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-21

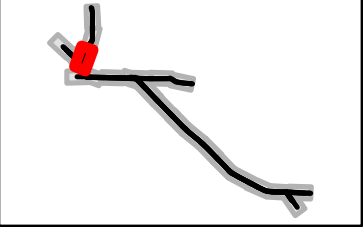


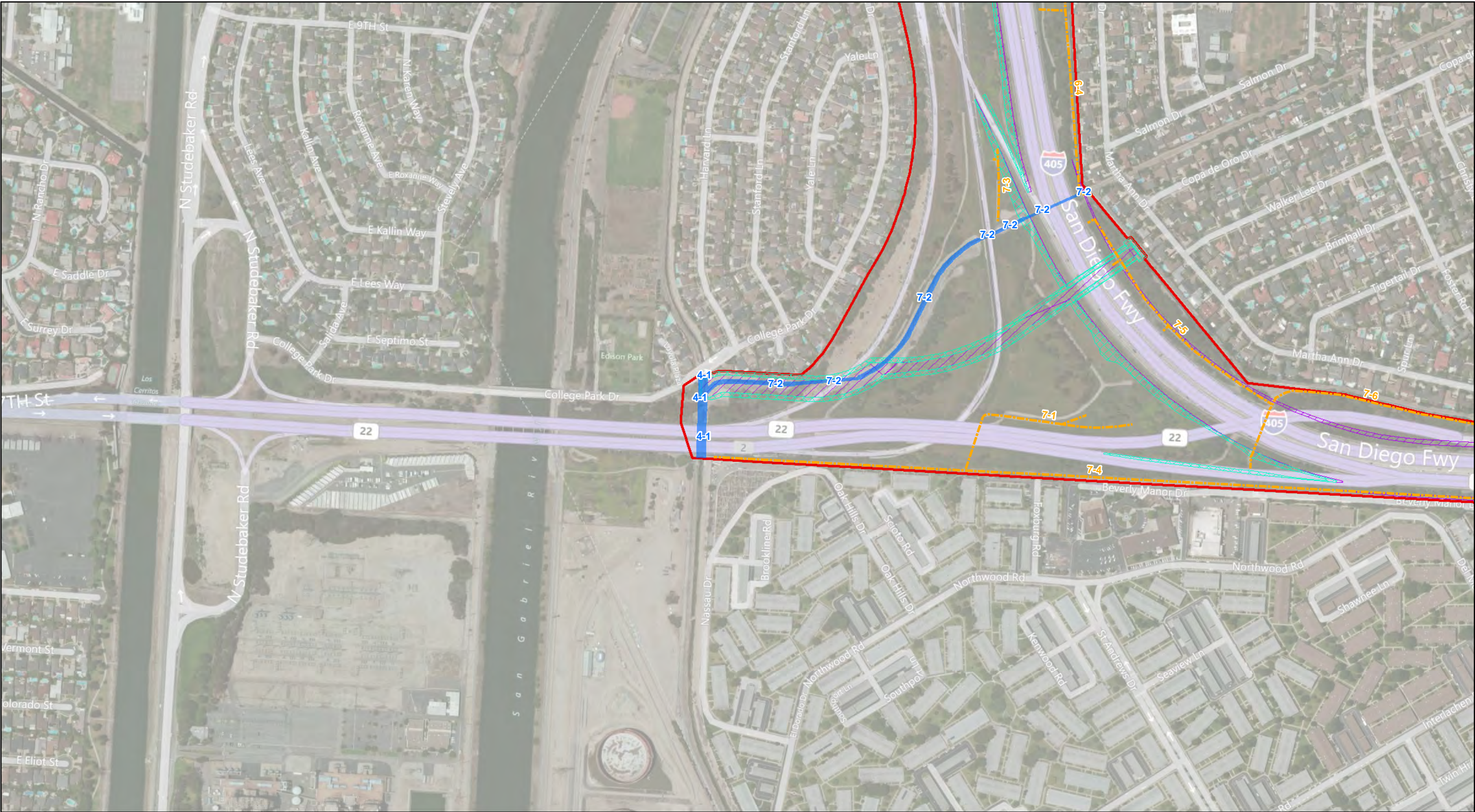


- Study Area
- Alternative 3 Temporary Impact
- Alternative 3 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Non-Jurisdictional Feature with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-22

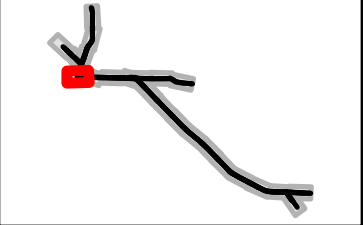




- Study Area
- Alternative 3 Temporary Impact
- Alternative 3 Permanent Impact
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- Clean Water Act Section 404 Jurisdictional Limits with Feature ID Number
- USACE-Defined Wetland
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- Non-Jurisdictional Feature with Feature ID Number



USACE, RWQCB, CDFG
Drainage Exhibit
Alternative 3
March 2012
Figure 3-23



O8: USACE Preliminary Jurisdictional Determination



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
915 WILSHIRE BLVD
LOS ANGELES, CALIFORNIA 90017

August 13, 2014

Ms. Smita Deshpande, Branch Chief
Attention: Chris Waterston
California Department of Transportation, District 12
3347 Michelson Drive, Suite 380
Irvine, California 92612

SUBJECT: Preliminary Jurisdictional Determination Regarding Geographic Jurisdiction

Dear Ms. Deshpande:

I am responding to your request (File No. SPL-2009-00714-SCH) dated August 7, 2014 for a preliminary Department of the Army jurisdictional determination (JD) for the San Diego Freeway (Interstate 405) Improvement Project site (33.745760° N, -118.005547° W) located within Orange County, California.

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether or not the proposed project is located within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act. This evaluation pertains only to geographic jurisdiction.

Based on available information, I have preliminarily determined waters of the U.S. may be present on the San Diego Freeway (Interstate 405) Improvement Project site in the approximate locations noted on the enclosed drawing. The basis for this finding can be found on the enclosed Preliminary JD form. Please be aware preliminary JDs are non-binding indications of the presence of waters of the U.S., including wetlands, on a parcel, are advisory in nature and may not be appealed. However, you are hereby informed of your option to request an approved JD, which may be appealed. Note that for purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S.

Preliminary and approved JDs are fully explained in the enclosed Regulatory Guidance Letter 08-02, dated June 26, 2008. Further, proffered individual permits (and all terms and conditions contained therein), individual permit denials, and any jurisdictional issues may also be appealed pursuant to 33 CFR Part 331.

This determination was conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the San Diego Freeway (Interstate 405) Improvement Project site identified in your request. This determination may not be valid for the wetland conservation provisions of the

Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact me at 213-452-3357 or via e-mail at Sophia.C.Ma@usace.army.mil. Please also complete the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey, which would help me to evaluate and improve the regulatory experience for others.

Sincerely,

MA.SOPHIA.C.1
289108447

Digitally signed by MA.SOPHIA.C.1289108447
DN: c=US, o=U.S. Government, ou=DoD,
ou=PKI, ou=USA,
cn=MA.SOPHIA.C.1289108447
Date: 2014.08.13 11:16:53 -0700

Sophia Ma
Project Manager
Transportation and Special Projects Branch
Regulatory Division

Enclosure(s)